

AN ELECTRONIC COMMERCE SOLUTION FOR PHYSICS
LABORATORY MANAGERS

By

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A Master's paper submitted to the faculty of the
School of Information and Library Science of the
University of North Carolina at Chapel Hill in partial
fulfillment of the requirements for the degree of
Master of Science in Information Science.

Chapel Hill, North Carolina

July, 2000

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Daniel John Green. An Electronic Commerce Solution for Physics Laboratory Managers. A Master's Project for the M.S. in I.S. degree. July, 2000. 153 pages. Advisor: Gregory B. Newby.

This project developed an electronic commerce solution for Physics Laboratory Managers in order to replace and streamline a present informal intradepartmental loan system. The first section of this paper is an overview of the problem facing Laboratory Managers in university physics departments. The second half of the paper focuses upon the technology used to complete this project, the classification schemes implemented, and the features of the final product. Appendixes will contain the complete code and data required to replicate this project.

Headings:

Electronic commerce.

Front-end software.

Information systems - Design.

Information systems - Special subjects - Physics.

Online catalogs.

PHP (Computer language).

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Introduction

There is a problem that most colleges and universities throughout the United States face. Their Physics Departments all have large amounts of laboratory equipment used during classroom presentations. This equipment (commonly referred to as a Lab Demo) is regularly exchanged within the various sections of the Department through an informal loan system¹. Usually managed by a single, or group of, Lab Managers, this “informal” method of intradepartmental commerce can consume up to sixty percent of their work time to administer. Methods of letting the instructors know what is available to them range from a static listing (either online, or in the form of a yearly (sometimes bi-yearly) publication) to simply a large warehousing area from which professors must personally extract the instruments they will need for a demo. Often, professors in need of a specific piece of equipment or demo will use email, voicemail, or just walk down to the storage area for the gear and ask the Lab Manager in person. In most universities, there is currently no way for a professor working in his or her lab to quickly identify which demos or specific pieces of equipment are available for their use.

I believe that an electronic commerce influenced website will be a more efficient way to do business in this environment than the informal, word of mouth, practice for an intradepartmental demo/equipment loan system - as presently used by most Universities. When I speak of an “electronic commerce influence website” I mean a professional lab

¹ NCSU has the honor of being one of the few schools to precede this proposal with the creation of a full-automated catalog and ordering system. Indiana, Purdue, U.C. Berkley, University of Maryland, University of Virginia, and Virginia Tech each offer a basic online form to request demonstrations.

support infrastructure that uses the technology seen in, and the inclusion of components from, many of today's successful commercial websites. Some of these components are "shopping carts" (used to place orders/requests), database driven catalogs (to see what is available), user profiles (to know who the "customer" is), and an administrative backend (to ensure that the customer gets what they need). The "informal word of mouth" approach includes a face-to-face conversation, a telephone based interaction, or a memo or email between the two parties (the users and the Lab Manager). The loan system can involve any departmental item, but in this case, I will focus on those objects used by the department, specifically, physics departments, for teaching demonstrations.

I propose that an electronic commerce site will make the user more aware of his or her choices of items, allowing better communication with the Lab Manager as to what the user wishes to borrow and when. Overall, transactions will be completed with less time and effort than present informal methods allow. For the Lab Manager, the electronic system will track orders more precisely; provide greater detailed information on both the user and their orders; and will streamline the overall process - from the initial request for the item, to its return to the stockroom.

Analysis

Electronic commerce provides a long list of benefits that an informal system does not. An online catalog, shopping-cart services, and real-time inventory checks have become the social norm in the electronic world. Customers expect to be greeted on arrival, and to have content personalized to their likes and dislikes. The businesses, in return, receive a centralized administration, reports on user and product activity, and the ability to market other products to their customer base. In addition, online sales are streamlined, reducing delivery time and with it, increasing customer satisfaction². An article by Pat Auger and John Gallaughar, explains that organizations with an electronic commerce site become customer-focused, lower their cost of doing business, and at the same time, allow for customization and personalization of products and services to their customers. The customers, on the other hand, are able to do business twenty-four hours a day, seven days a week; they can expect a quicker delivery time; and are offered greater communication with the producer³.

The amount of information available to professors through an online lending system far outweighs that which traditional media offers and access is an easy click away⁴. This increase in information potentials, argue Phillips and Horton, is an ongoing process in which each new media must outpace the rest. Images and text can be enhanced

² Gilbert, Alorie and Beth Bachelidor. "The Big Squeeze." *Information Week* 27 March 2000. <http://www.informationweek.com/779/channel.htm>

³ Auger, Pat and John M. Gallaughar. "Factors Affecting the Adoption of an Internet-Based Sales Presence for Small Businesses." *The Information Society* 13:55-74, 1997: Taylor & Francis.

⁴ Phillips, Melodie R. and Veronica Horton. "Incorporating the Internet into the Marketing Classroom: Problems, Opportunities and Thoughts." *The Internet and Higher Education* 1(3): 223-230, 1998: JAI Press Inc.

with video clips, interactive demonstrations, product availability, previous uses of the product, and suggestions for similar or alternative experiments.

Armitage and Enser propose that our society is a visual one⁵. The advantages of an image based system (in this case a web-based catalog) would provide for greater user satisfaction, increased browsing potential, and a greater comprehension of the demonstration – both for its purpose, and in the reservation process required to obtain the item. More than one Lab Manager has been confronted with the request for “that long, flat-ended stick – the one with the red ball.”

⁵ Armitage, Linda H. and Peter G.B. Enser. “Analysis of user need in image archives.” **Journal of Information Science**, 23 (4) 1997, pp. 287-299. Bowker-Saur Publishing.

Problem Description

Overview

The Lab Manager of the Department of Physics and Astronomy at the University of North Carolina at Chapel Hill has requested a solution to the scheduling of equipment used during classroom presentations. These fixed sets are referred to as lecture or laboratory demonstrations, or “Lab Demos.” Professors in need of a particular demonstration will email or ask the Lab Manager in person. Previously only an extremely outdated and inaccurate website showcases the possible choices of demos, without providing information on the demos’ availability. The Lab Manager desired a way to automate this entire process, such that professors could view the demo online; possibly view a multimedia presentation on the demonstration; check its status; and submit a standard request form providing not only contact information but the dates the demo is required.

Project Objectives

The primary objectives of this project were to:

- Showcase to professors what lecture materials the department owns.
- Inform professors what Lab Demos are available to borrow.
- Allows professors to reserve demos online.
- Provide the Lab Manager with all the information he requires from consumers.
- To have this information delivered in a consistent, organized manner.
- Allow the Lab Manager to easily track the location of Lab Demos.
- Provide the Lab Manager with the ability to develop usage statistics.

Project Overview

Technology

This project makes use of two primary forms of technology: PHP and MySQL.

The fundamental reason that an estimated half *million* servers around the world run MySQL is that it provides an incredible amount of database power at a cost that is *zero* in most cases, and a few hundred dollars in others. But another strong reason that MySQL is chosen to power web-based database applications is PHP...PHP is a powerful web scripting language that has strong ties to the MySQL database. Both tools are powerful in their own right, but together they can compete with any web-database tool on the market.

-John Paul Ashenfelter⁶

PHP is a server-side scripting language for creating dynamic Web pages. You create pages with PHP and HTML. When a visitor opens the page, the server processes the PHP commands and then sends the results to the visitor's browser, just as with ASP or ColdFusion. Unlike ASP or ColdFusion, however, PHP is Open Source and cross-platform. PHP's language syntax is similar to C's and Perl's. PHP runs on Windows NT and many Unix versions, and it can be built as an Apache module and as a binary that can run as a CGI. When built as an Apache module, PHP is especially lightweight and speedy. Without any process creation overhead, it can return results quickly, but it doesn't require the tuning of mod_perl to keep your server's memory image small.

MySQL (pronounced "My Ess Que Ell" , not "MY-SEQUEL") is a relational database management system, a system that separates data into interrelated tables rather than storing it all in one large file. MySQL uses SQL ("Structured Query Language"), the

⁶ Ashenfelter, John Paul. "YourSQL Database Might Just Be MYSQL." **O'Reilly Network**. 16 June 2000. <http://www.oreillynet.com/pub/a/network/2000/06/16/magazine/mysql.html>

most common standardized language used to access databases, allowing easy access from PHP and other programming languages. It is very fast, reliable and extremely easy to use. Each of the following technologies were chosen for their speed, their ability to be placed upon many platforms, and most importantly, for the fact that each is free.

PIRA

The site will classify demonstrations according to the PIRA Demonstration Classification Scheme. PIRA, the Physics Instructional Resource Association, is attempting to develop a “logically organized and universally inclusive taxonomy” by assigning a unique catalog number to each laboratory demonstration⁷. The PIRA number for each demonstration is composed from four parts: the area of study, the topic within that field, the concept studied, and the specific demonstration.

Example: 2C20.10 Bernoulli Tubes

2	Area	Fluid Mechanics
C	Topic	Dynamics of Fluids
20	Concept	Bernoulli Force
.10	Demonstration	Bernoulli Tubes

Feature Highlights

Catalog

While this site was created with an authenticated user in mind, guest access has been expected and accommodated. Anyone may visit and browse the contents

⁷ “Physics Instructional Resource Association.” 27 July 1997
<http://physics.csufresno.edu/pirapub/default.html>

users may view all of their previous orders) and a confirmation notice is sent to both the user and the Lab Manager. The format of these emails are very relaxed and may be changed by the Lab Manager as deemed necessary. All orders may be cancelled by the user before they are delivered.

Searching

The site allows the user to search by any word within a demonstration's area, topic, and concept; by the PIRA number; or simply by its name.

Profiles

Every authenticated user may have one or more profiles associated with them. These profiles assist in making the checkout process as painless as possible, providing information on the order's purchase, destination, and standard pickup and return times. As he is checking out, the user selects which profile to select this information from. Most profiles are based off of the professors' classes and managed by the Lab Manager.

Administrative Controls

Housed within the administrative pages lies another, sophisticated search engine. Designed to facilitate a Lab Manager's need to administrate the contents of the demonstration catalog, the search engine allows the Manager to easily edit current demonstration information and quantities; add additional demonstrations; manage users and user profiles; and view upcoming (and past) orders. In addition, Lab Managers may declare a demonstration temporarily unfit for use. This automatically removes the demonstration from circulation - Lab Managers have the option to have the system alert all users with current reservations of this demonstration.

Modular Functions

Built into the administrative pages is the ability to add PHP scripts to a specially designed database. These functions can be used to analyze statistical trends; automatically create detailed reports; or track user requests, just to name a few possibilities.

Significance of the Research

The ramifications of this project will be on a few different levels. Should my hypothesis that a Internet e-commerce site would be more efficient prove to be correct, users, the Lab Managers, and their department will all benefit.

Lab Managers desire to automate this entire process, such that professors may view the demo online, possibly as a multimedia presentation, check its status, and submit a standard request form providing not only contact information but the dates the demo is required. In doing so, I believe that such a system will also increase the efficiency of the system from an administrative point of view. Because of this, the satisfaction of both the Lab Manager and his customers, the faculty, should be increased. Increased customer support will always lead to happier users.

The organization, distribution, and creation of laboratory demonstration media often require up to sixty percent of the productive output of three full-time equivalent positions with a medium sized department of fifty to one hundred professors. Hopefully, an automated system could reduce the time and money spent here.

Conclusion

Electronic commerce has brought the world to our fingertips. Want to order a television, DVD player, or movies to watch? Thanks to the speed of shipping companies, the products you order today can be on your doorstep tomorrow. The ability to make purchases fast, easily, and with little personal effort has become the new standard by which to design your business presence.

We live in a world of instantaneous gratification. Speed is of the essence. Whether it is in the purchasing of items, or the retrieval of information from an online search engine, the need exists. And it is effecting everyone. We have reached the point where a five-minute wait for a document or service is unacceptable, and undesired even if the need is not immediate.

An electronic service could provide the Lab Manager with detailed information on the professor's reservations, patterns in reservation choices and times, and the ability to track heavily used items. Automatic preparation of reports and customization for each professor could help anticipate future needs, and in doing so, streamline the entire reservation process from the professor's point of view. He would have access to an update to date online catalog from which he may order or even query the system to see those demonstrations that have been used by previous teachers of his classes. After making his purchase, he needs only to go to his class.

One is constantly bombarded with the possibilities of technology. Newspaper ads, television, and movies all push the next generation of technology. The online world is influencing more and more of what we do, know, and see. It is only natural that once individuals within an organization have tasted the benefits from online sources of

information that they would want to implement similar information technologies locally.

The introduction of new information technologies will provide a daily reward: complex manipulation of information, fast access to information, and the gratification that accompanies it.

APPENDIX A: AVAILABILITY

Physics and Astronomy Lab Demonstrations - Microsoft Internet Explorer

Address: <http://www.physics.unc.edu/demos/index.phtml?session=XIQgiuPa&level=2&string=Interference>

LAB DEMONSTRATIONS
DEPARTMENT OF PHYSICS AND ASTRONOMY AT THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Search Database for: Keyword

LAB DEMOS | INSTRUCTIONS | FEEDBACK | LOGOUT

Shopping Cart
Lodestone Del
Pound Iron Bar Del
Meissner Effect Del
phys026

Areas of Study:
Astronomy & Astrophysics
Electricity & Magnetism
Fluid Mechanics
Mechanics
Modern Physics
Optics
Thermodynamics
Waves & Oscillations

User Information
Welcome Dan Green
Orders
Next 5 Reservations
Induction Coi... 07/11
Move Wire In ... 07/11
Smash The Blo... 07/12
Constant Mass... 07/12
Candle In A B... 07/12

Optics: Interference: Interference From Two Sources (2)

- Double Slits And Laser 6D10.10
- Microwave Two Slit Interference 6D10.20

Optics: Interference: Gratings (3)

- Gratings And Laser 6D20.15
- Regular And Irregular Patterns 6D20.56
- Soap Film Interference 6D30.20

Optics: Interference: Interferometers (1)

- Microwave Interferometer 6D40.25

Start | Physics and Astrono... | dissertation-v1.2 - Microsof... | Address | 10:00 PM

This project may be found, in use, online at:

<http://www.physics.unc.edu/demos/index.phtml>

APPENDIX B: DATA DICTIONARY

Tables

Demotable Table:

Field	Type	Attributes	Null	Default	Extra
lab_id	int(11)		No	0	auto_increment unique id of the demo
tier1	varchar(25)		No		which primary type of Physics
tier2	varchar(40)		No		the field of the above type
tier3	varchar(40)		No		the subfield of the above field
name	varchar(50)		No		name of the demo
number	varchar(10)		No		identifying PIRA number of the demo
available	smallint(6)		Yes		number of available demos of this type
location	varchar(20)		Yes		location in the cabinets
icon	varchar(50)		Yes		icon for the level 2 display pages
image	varchar(50)		Yes		picture
multimedia	varchar(50)		Yes		multimedia files
description	text		Yes		description of the lab setup instructions and approx. time
setup	text		Yes		the date that this lab was entered into database
date_entered	timestamp(14)		Yes		

Function Table:

Field	Type	Attributes	Null	Default	Extra
id	int(11)		No	0	auto_increment unique id of each function
name	varchar(100)		No		name of each function
function	text		Yes		body of each function
uses	int(11)		No	0	amount of times used
category	varchar(50)		No		category of function

Profiles Table:

Field	Type	Attributes	Null	Default	Extra
id	int(11)		No	0	auto_increment unique id of each profile
userid	varchar(10)		No		user associated with each profile
purpose	varchar(15)		No		purpose of transaction for statistics
room	mediumint(9)		No	0	room associated with this profile
timestart	time		No	00:00:00	class beginning time associated with this profile
timeend	time		No	00:00:00	class ending time associated with this profile

Receipts Table:

Field	Type	Attributes	Null	Default	Extra
id	int(11)		No	0	auto_increment unique id of receipts
receipt	text		Yes		the html encoded receipt the username associated with receipt – used to prevent unauthorized viewing of receipt
username	varchar(15)		No		

Session Table:

Field	Type	Attributes	Null	Default	Extra
ID	varchar(8)		No		unique 8 char session identifier
LastAction	timestamp(14)		Yes		the last time the user did anything
auth	char(1)		Yes		whether or not the user has been authenticated
username	varchar(15)		Yes		if authenticated, then under what username

ToDo Table:

Field	Type	Attributes	Null	Default	Extra
id	smallint(6)		No	0	auto_increment unique id of todo item
number	varchar(10)		No		demo PIRA number
borm	char(1)		No		Broken or Modify
problem	text		Yes		description of the problem
date_entered	timestamp(14)		Yes		date and time entered

Transactions Table:

Field	Type	Attributes	Null	Default	Extra
transaction_id	int(11)		No	0	auto_increment unique id of the transaction
user_id	varchar(15)		No		kerberos (Physics email) id of the user
lab_id	int(11)		No	0	unique id of the demo
date_needed	timestamp(14)		Yes		Day and time the demo is needed
date_return	timestamp(14)		Yes		Day and time of the day the demo will be returned
purpose	varchar(12)		No		tracks the uses of the item (primarily which classes) tells the lab manager
delivery	char(3)		No		whether he has to setup the lab and where
date_order	timestamp(14)		Yes		Date and time of the order
receipt_id	int(11)		No	0	id of the associated receipt

Users Table:

Field	Type	Attributes	Null	Default	Extra
userid	varchar(10)		No		unique userid
passwd	varchar(15)		No		users Password
last_access	timestamp(14)		Yes		last time the account was accessed
fullname	varchar(50)		No		fullname of user
email	varchar(50)		No		email of user

Scripts and Functions**Function – addshoppingitem.php3**

Purpose: adds a demonstration to the users shopping basket.
 Inputs: session, PIRA number of the demo.
 Outputs: None.

Function – authed.php3

Purpose: checks to see if the current session has been authorized.
 Inputs: session id
 Outputs: returns either a “y” or nothing.

Page – authing.phtml

Purpose: takes the information (username / password) provided by the user and attempts to authorize them using the users table.
 Inputs: username, password, sessionpass
 Outputs: if above exists and is correct, updates the “authed” and “username” fields of the entry in the session table matching the variable “sessionpass.”

Function – cancelorder.php3

Purpose: allows the user to cancel his order from both the transaction table and the receipts table. Sends cancellation notice to Lab Manager.
 Inputs: session, receipt_id
 Outputs: None.

Function – chkconflicts.php3

Purpose: checks to determine if each demonstration in a users shopping basket has previous orders for the requested dates and times.

Inputs: session, time wanted, time to return.

Outputs: Array with all conflicting times.

Function – chkout.php3

Purpose: allows the user to checkout his chosen demos. Gets the information from the user required by the Lab Manager.

Inputs: session, profile, purpose, room, comments, time needed, time to return, whether or not demos need delivery, any conflicts.

Outputs: If no conflicts are apparent, passes the information to the processor function.

Function – delshoppingitem.php3

Purpose: deletes a demonstration from the users shopping basket.

Inputs: session, PIRA number of the demo.

Outputs: None.

Function – demodisplay.php3

Purpose: display the array received from demosearch.php3 according to its level/type.

Inputs: session, level, the users search string, array from demosearch.php3.

Outputs: text to screen

Function – demosearch.php3

Purpose: searches the database for a search string. Boundaries of the search are defined by the level of search requested.

Inputs: session, level, search string

Outputs: array of items matching level of search and the search string

Function – displayimage.php3

Purpose: return a string which will display an image in HTML, including all of the images vital statistics.

Inputs: imagename, position of the image in respect to surrounding text. Also requires Constants IMAGEURL and IMAGEAFS from the calling page. These constants give the image directory root in regards to AFS and its url.

Outputs: “<src img=” string for later display of the image

Function – getauthed.php3

Purpose: displays the form to enter your username and password.

Inputs: username, password.

Outputs: sends data to authing.phtml

Function – getlabavailable.php3

Purpose: determines the amount of demos available for ordering by its PIRA number and the demotable table.

Inputs: PIRA number of demo.

Outputs: Number Available of demo.

Function – getlabid.php3

Purpose: determines the lab_id of a demo by its PIRA number and the demotable table.

Inputs: PIRA number of demo.

Outputs: Lab_id of demo.

Function – getlabimage.php3

Purpose: determines the image associated with a demo by its PIRA number and the demotable table.

Inputs: PIRA number of demo.

Outputs: image information of demo.

Function – getlablocation.php3

Purpose: get the location of an individual lab from the demotable table.

Inputs: lab_id

Outputs: location of lab.

Function – getlabname.php3

Purpose: get the name of a lab from the demotable table.

Inputs: lab_id

Outputs: name of the lab

Function – getlabname2.php3

Purpose: get the name of an individual lab from the demotable table.

Inputs: PIRA number of demo.

Outputs: name of the lab.

Function – getlabnumber.php3

Purpose: get the number of an individual lab from the demotable table.

Inputs: lab_id

Outputs: number of the lab

Function – gettransactiondates.php3

Purpose: gets the date needed and date return of a record in the transaction table.

Inputs: transaction id

Outputs: array of date needed and date return.

Function – getuseremail.php3

Purpose: gets the user's email from the current session

Inputs: session

Outputs: email

Function – getusername.php3

Purpose: gets the username from the current session

Inputs: session

Outputs: username

Page – index.phtml

Purpose: main page of the lab demonstration pages. Calls most of the other scripts.

Inputs: none

Outputs: displays the main page, and determines what subcomponents must also be displayed.

Function – listtier1.php3

Purpose: displays all the top levels in the lefthand navigation bar which are set to be displayed.

Inputs: session

Outputs: displays the top level sections of demos on the main page.

Function – nextfewdays.php3

Purpose: creates the options for a HTML select – gives the next 'x' days.

Inputs: number of days to list starting with the present day, the day which should be highlighted.

Outputs: <option> code in HTML.

Function – processorder.php3

Purpose: takes all the information from checkout.php3 and updates the appropriate tables in the database.

Inputs: session, time needed and time to return, purpose, room, delivery choices, and any comments.

Outputs: Sends out emails to professor and Lab Manager, creates receipts, logs transactions, returns user to receipt page of current reservation.

Function – reverttimestamp.php3

Purpose: takes a MySQL timestamp and reverts it to UNIX format.

Inputs: timestamp

Outputs: UNIX timestamp

Function – session.php3

Purpose: tracks the users. Updates current sessions, creates new ones, and deletes ones that haven't changed in 2 hours.

Inputs: session_id

Outputs: session_id

Function – shoppingcart.php3

Purpose: displays the contents of a users shopping cart and allows him to checkout.

Inputs: session, level, search string.

Outputs: text to the screen

Function – showitemreserves.php3

Purpose: displays the next time that an individual demo is reserved for. Used primarily for level three displays, but may be incorporated into process.phtml to prevent already checked out items from being checked out at the same time.

Inputs: lab_id

Outputs: text to the screen

Function – showreserves.php3

Purpose: shows the next ten items reserved by the user.

Inputs: session, username

Outputs: text to the screen

Function – userresolve.php3

Purpose: get the full name of the user from his userid

Inputs: userid (referred to as username as well)

Outputs: User's full name or username if user name is not found within the user database.

If not found or duplicates are found, a note is sent to the database administrator asking him to correct this.

Function – admin/adddemo.php3

Purpose: displays a form to add a demonstration to the demotable

Inputs: result array, area, editing mode

Outputs: text to the screen.

Function – admin/brokendemo.php3

Purpose: reduces the number of a certain demo in circulation.

Inputs: PIRA number of demo.

Outputs: None.

Page – admin/config.php

Purpose: contains all of the user specified settings for the catalog/e-commerce site.

Inputs: None.

Outputs: None.

Function – admin/display.php3

Purpose: display the array received from search.php3 according to its area.

Inputs: editing mode, area, search string, array from search.php3

Outputs: text to screen

Page – admin/index.phtml

Purpose: main page of the administration pages. Calls most of the other scripts.

Inputs: none

Outputs: displays the main page, and determines what subcomponents must also be displayed.

Function – admin/search.php3

Purpose: searches the database for a search string. Boundaries of the search are defined by the area of search requested.

Inputs: editing mode, area, search string

Outputs: array of items matching area of search and the search string.

CSS – admin/directory.css

Purpose: cascading style sheet that determines how the catalog and administrative pages will be displayed.

Inputs: None.

Outputs: None.

APPENDIX C: CODING

Function – addshoppingitem

```
<%
function addshoppingitem($number, $session)
{
    /* -----Connects to database */
    $mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
    mysql_select_db(DATABASE, $mysql_link);

    /*queries */
    $query="INSERT INTO";
    $query.=" ";
    $query.=$session;
    $query.=" SET item='$number'";
    $result=MYSQL_QUERY($query, $mysql_link);
    RETURN;
}
%>
```

Function – authed

```
<%
function authed($session)
{
    #looks at the session table, and sees if the variable for auth =
    'Y'
    #if so returns true,
    # if not returns false.
    /* CONNECT TO DB */
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);
    mysql_select_db(DATABASE, $mysql_link);

    $query="SELECT auth, username FROM session WHERE
(ID='$session')";
    $result=MYSQL_QUERY($query, $mysql_link);
    $auth=MYSQL_RESULT($result,0,'auth');
    RETURN($auth);
}

%>
```

Page – authing

```

<%

include("admin/config.php");

# not a function but a page receiving form data
# send username and passwd to C program to confirm auth
# Receive T / F

# Set either a cookie or dB
# IF True
#   {
#     Set $auth='y'
#   }
# ELSE
#   {
#     Set $auth='n'
#   }

/*-----Connects to database */
$mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
mysql_select_db(DATABASE, $mysql_link);

$query="SELECT passwd FROM users WHERE userid='$username'";
$result=MYSQL_QUERY($query, $mysql_link);

IF (MYSQL_NUM_ROWS($result)!=0)
  {
    $dbpasswd=MYSQL_RESULT($result,0,'passwd');
    IF ($passwd==$dbpasswd)
      {
        $timef=date(YmdHis);
        $query="UPDATE users SET last_access='$timef' WHERE
userid='$username' ";
        $result=MYSQL_QUERY($query, $mysql_link);

        $query="UPDATE session SET LastAction='$timef',
auth='y', username='$username' WHERE (ID='$session)";
        $result=MYSQL_QUERY($query, $mysql_link);

      }
  }

$sstring=urlencode($sstring);
$url="index.phtml?session=$session&level=$level&sstring=$sstring";

header("Location: $url");
%>

```

Function – cancelorder

```

<%
function cancelorder($receipt, $session)
{
    /* -----Connects to database */
    $mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
    mysql_select_db(DATABASE, $mysql_link);

    /*queries */
    $aname=getUserName($session);
    $fullname=userResolve($aname);

    $query3="SELECT receipt FROM receipts WHERE ((id=$receipt) AND
(username='$aname'))";
    $result3=MYSQL_QUERY($query3, $mysql_link);
    $receiptmessage=MYSQL_RESULT($result3,0,'receipt');

    #####SEND EMAIL TO LABMANAGER

    ###e. sends email to Lab Manager
    $mail_recip=DEMOEMAIL;
    $mail_subject="Reservation Cancelled";
    $mail_header="From: Lab Reserve\n";
    $message="User ".$username." (".$fullname.") \nHas cancelled an
order. \n";

    mail ($mail_recip, $mail_subject, $message, $mail_header);

    #####SEND EMAIL TO PROF
    ###f. sends confirmation email to profs
    # get the profs email.
    $mail_recip=getUserEmail($session);

    $mail_subject="Reservation Cancelled";
    $mail_header="From: Lab Reserve\n";

    $message="You have successfully cancelled an order. \n";

    mail ($mail_recip, $mail_subject, $message, $mail_header);

    #####DELETES RECEIPT
    $query="DELETE FROM receipts WHERE ((id=$receipt) AND
(username='$aname'))";
    $result=MYSQL_QUERY($query, $mysql_link);

    #####DELETES TRANSACTIONS
    $query2="DELETE FROM transactions WHERE ((receipt_id=$receipt)
AND (user_id='$aname'))";
    $result2=MYSQL_QUERY($query2, $mysql_link);
    RETURN;
}
%>

```

Function – chkconflicts

```

<%
function chkconflicts($session,$timestamp1,$timestamp2)
{
    /* -----Connects to database */
    $mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
    mysql_select_db(DATABASE, $mysql_link);

    $conflicts="";

    /*display query */
    $query="SELECT item FROM $session ORDER BY item";
    $result=MYSQL_QUERY($query, $mysql_link);

    IF (MYSQL_NUM_ROWS($result)!=0)
    {
        FOR ($x=0;$x<MYSQL_NUM_ROWS($result);$x++)
        {
            $numconflict="0";
            $item=MYSQL_RESULT($result,$x,'item');
            $labid=getLabId($item);
            $currenttime=date("YmdHis");
            $available=getLabAvailable($item);
            $query2="SELECT transaction_id, date_needed,
date_return FROM transactions WHERE ((lab_id=$labid) AND
(date_return>=$currenttime))";
            $result2=MYSQL_QUERY($query2, $mysql_link);

                FOR ($y=0;$y<MYSQL_NUM_ROWS($result2);$y++)
                {
                    $dateN=MYSQL_RESULT($result2,$y,'date_needed');
                    $dateR=MYSQL_RESULT($result2,$y,'date_return');
                    $transaction=MYSQL_RESULT($result2,$y,'transaction_id');
                    IF (((strcmp($timestamp1,$dateR)>0) AND
(strcmp($timestamp2,$dateR)>0)) OR ((strcmp($timestamp1,$dateN)<0) AND
(strcmp($timestamp2,$dateN)<0)))
                    {
                        #Valid Date
                    }
                    ELSE
                    {
                        #Conflict
                        $numconflict++;
                        IF ($available<=$numconflict)
                        {
                            $conflicts[$item]=$transaction;
                        }
                    }
                }
            }
        }
    }

    RETURN($conflicts);
}

```

%>

Function – chkout

```

<%
function chkout($session, $profile, $ChkOut, $purpose, $room,
$comments, $timestamp1, $timestamp2, $delivery, $conflicts)
{
    $mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
    mysql_select_db(DATABASE, $mysql_link);

    # QUERIES PROFILES DATABASE THE FIRST RUNTHROUGH
    # NOT NEEDED IF PASSING INFORMATION
    IF ($ChkOut=="Checkout")
    {
        $query="SELECT * FROM profiles WHERE (id='$profile')";
        $result=MYSQL_QUERY($query, $mysql_link);
        IF (MYSQL_NUM_ROWS($result)!=0)
        {
            $purpose=MYSQL_RESULT($result,0,'purpose');
            $room=MYSQL_RESULT($result,0,'room');
            $timeout=MYSQL_RESULT($result,0,'timestart');
            $timein=MYSQL_RESULT($result,0,'timeend');
            $hrsin=substr($timein,0,2);
            $hrsout=substr($timeout,0,2);
            $minin=substr($timein,3,2);
            $minout=substr($timeout,3,2);
        }
    }
    ELSE
    {
        $hrsin=substr($timestamp2,8,2);
        $hrsout=substr($timestamp1,8,2);
        $minin=substr($timestamp2,10,2);
        $minout=substr($timestamp1,10,2);
        $day1=substr($timestamp1,0,8);
        $day2=substr($timestamp2,0,8);
    }
}
%>
<form method="POST" action="<% PRINT $PHP_SELF; %>?session=<% PRINT
$session; %>">

    <table width="450" border="0" cellspacing="0" cellpadding="0"
align="left">
        <tr align="top">
            <td rowspan="3" valign="top" NOWRAP width="250">Delivery (v.
Pickup)
                <p>
                    <%
                    IF ($ChkOut=="conflicts")
                    {
                        PRINT ("<font size=\"-2\">");
                        PRINT ("<font color=\"RED\">");
                        PRINT ("Sorry, some demos are unavailable for the time
selected.<BR>");
                        PRINT ("Please remove the demo or select another
time.<BR><BR>");
                    }
                </p>
            </td>
        </tr>
    </table>

```

```

        PRINT ("</font>");
        PRINT ("</font>");
    }
    $opt="";
    IF ($delivery[all]=="y") {$opt=" CHECKED";}
    PRINT ("<input type=\"checkbox\" name=\"delivery[all]\" $opt
value=\"y\">");
    PRINT ("Deliver All<BR><BR>");

$query="SELECT item FROM $session ORDER BY item";
$result=MYSQL_QUERY($query, $mysql_link);
FOR ($x=0;$x<MYSQL_NUM_ROWS($result);$x++)
    {
        $opt="";
        $item=MYSQL_RESULT($result,$x,'item');
        $name=getLabName2($item);
        $name=substr($name,0,21);
        IF ($delivery[$item]=="y") {$opt=" CHECKED";}
        PRINT ("<input type=\"checkbox\"
name=\"delivery[$item]\" $opt value=\"y\">");
        PRINT ("<font size=\"-1\">");
        PRINT $name;
        PRINT ("</font>");
        PRINT (" ");
        PRINT ("<font size=\"-2\">");
        PRINT ("<a
href=\"${PHP_SELF}?session=$session&profile=$profile&delete=$item&Process
=Checkout&timestampl=$timestampl&timestamp2=$timestamp2&purpose=$purpos
e&room=$room\">");
        PRINT ("Del");
        PRINT ("</a>");
        PRINT ("</font>");
        PRINT ("<BR>");
        IF ($conflicts[$item]!="")
            {
                $transaction=$conflicts[$item];
                $date=getTransactionDates($transaction);
                $dateNe=revertTimeStamp($date[0]);
                $dateRe=revertTimeStamp($date[1]);
                PRINT ("<font size=\"-2\">");
                PRINT ("<font color=\"RED\">");
                PRINT date("m/j H:i",$dateNe);
                PRINT (" - ");
                PRINT date("m/j H:i",$dateRe);
                PRINT ("</font>");
                PRINT ("</font>");
                PRINT ("<BR>");
            }
    }
%>
<BR>Comments<BR>
<textarea cols="25" rows="4" name="comments"><% PRINT $comments;
%></textarea>
</td>
<td colspan="2" nowrap> Purpose:
    <input type="text" value="<% PRINT $purpose; %>" size="15"
maxlength="15" name="purpose">

```



```

        <select name="day3">
            <%
                nextfewdays(120,$day2);
            %>
        </select>
        <input type="text" value="<% PRINT $hrsin; %>" name="hrsin2"
size="2">:
        <input type="text" value="<% PRINT $minin; %>" name="minin2"
size="2">
        </p>
        </td>
    </tr>
    <tr>
        <td colspan="3" valign="top">
            <div align="center"> <BR>
                <input type="hidden" name="profile" value="<% PRINT $profile;
%>">
                <input type="submit" name="Process" value="Submit Order">
            </div>
        </td>
    </tr>
    <tr>
        <td colspan="3" valign="top">
            <div align="center">Press the button to submit this order.
Should one
                of the demos not be available during the time you have
selected, you
                will be returned to this page and the problems will be
presented. Otherwise, your request will be sent
                off to the Lab Manager.</div>
        </td>
    </tr>
</table>
</form>
    <%
        RETURN;
    }
%>

```

Function – delshoppingitem

```
<%  
function delshoppingitem($number, $session)  
{  
    /* -----Connects to database */  
    $mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);  
    mysql_select_db(DATABASE, $mysql_link);  
  
    /*queries */  
    $query="DELETE FROM";  
    $query.=" ";  
    $query.=$session;  
    $query.=" WHERE item='$number'";  
    $result=MYSQL_QUERY($query, $mysql_link);  
    RETURN;  
}  
%>
```



```

PRINT (": (");
PRINT $numrows;
PRINT (")");

PRINT ("

```

```

        $x=0;
        $sstring=urlencode($sstring);
        #IF (authed($session)=='y')
        #
        #
        #          PRINT ("<FORM
action="\http://www.physics.unc.edu/demos/checkout.phtml\>");
        #
        #
        #          WHILE ($x < $numrows)
        #          {
        #              $text="";

        #              PRINT ("<A
HREF="\$PHP_SELF?session=".$session."&level=1&sstring=");
        #              $urlname=urlencode($tier1);
        #              PRINT $urlname;

        #              PRINT ("\>");
        #              PRINT $tier1;
        #              PRINT ("</a>");
        #              PRINT (": ");
        #              PRINT $tier2;
        #              PRINT (": ");
        #              PRINT $tier3;

        #              $text.="<BR><BR>";

        #              $text.="<TABLE CELLPADDING=\"0\" CELLSPACING=\"0\"
BORDER=\"0\"><TR>";
        #              $col=1;
        #              $counter=0;
        #              WHILE ($tier3a==$tier3)
        #              {
        #                  $text.="<TD width=\"200\">";
        #                  $icon=MYSQL_RESULT($resultarray,$x,'icon');
        #                  $pos="left";
        #                  $name=MYSQL_RESULT($resultarray,$x,'name');
        #                  $number=MYSQL_RESULT($resultarray,$x,'number');
        #                  $labid=MYSQL_RESULT($resultarray,$x,'lab_id');
        #                  $text.="<a
href="\$PHP_SELF?session=".$session."&level=3&sstring=";
        #                  $text.=$number;
        #                  $text.=">";
        #                  $text.=displayImage($icon,$pos);

        #                  $text.="<font size=\"-1\">";
        #                  $text.=$name;
        #                  $text.="<BR>";
        #                  $text.=$number;
        #                  $text.="</font>";
        #                  $text.="</a>";

        #              }

        #              IF (authed($session)=='y')
        #              {

```

```

                                $text.="<BR><BR><a
href=\"\$PHP_SELF?session=$session&level=$level&sstring=$sstring&add=$nu
mber\"><font size=\"-2\">ADD</FONT></A>";
                                # $text.="<BR><input type=\"checkbox\"
name=\"demos[]\" value=\"\$labid\">";
                                }

                                IF ($col<$level2col)
                                {
                                    $text.="</td>";
                                    $col++;
                                }
                                ELSEIF ($col>=$level2col)
                                {
                                    $text.="</td></tr>";
                                    $col=1;
                                }
                                $x++;
                                IF ($x!=$numrows)
                                {
                                    $tier3a=MYSQL_RESULT($resultarray,$x,'tier3');
                                }
                                ELSE
                                {
                                    $tier3a="end";
                                }
                                $counter++;
                                }
                                $text.="</td></tr></table><BR>";
                                PRINT (" (");
                                PRINT $counter;
                                PRINT (")");
                                PRINT $text;
                                $text="";

                                IF ($x!=$numrows)
                                {
                                    $tier1=MYSQL_RESULT($resultarray,$x,'tier1');
                                    $tier2=MYSQL_RESULT($resultarray,$x,'tier2');
                                    $tier3=MYSQL_RESULT($resultarray,$x,'tier3');
                                }
                                }
                                PRINT ("<BR><BR>");
                                }
                                ELSE
                                {
                                    PRINT ("<div align=\"center\">");
                                    PRINT ("We're sorry.<BR>");
                                    PRINT ("No Demonstrations match that query.");
                                    PRINT ("</div>");
                                }
                                }
                                ELSEIF ($level==3)
                                {
                                    #----- Variables -----
                                    $sstring=urlencode($sstring);
                                    $labid=MYSQL_RESULT($resultarray,0,'lab_id');

```

```

$tier1=MYSQL_RESULT($resultarray,0,'tier1');
$tier2=MYSQL_RESULT($resultarray,0,'tier2');
$tier3=MYSQL_RESULT($resultarray,0,'tier3');
$labname=MYSQL_RESULT($resultarray,0,'name');
$labnum=MYSQL_RESULT($resultarray,0,'number');
$image=MYSQL_RESULT($resultarray,0,'image');
$multimedia=MYSQL_RESULT($resultarray,0,'multimedia');
$descript=MYSQL_RESULT($resultarray,0,'description');
$setup=MYSQL_RESULT($resultarray,0,'setup');
$avail=MYSQL_RESULT($resultarray,0,'available');
IF ($descript=="") {$descript="Not yet available";}
IF ($setup=="") {$setup="Not yet available";}
# -----TOP LISTING -----
PRINT ("<A
HREF=\" $PHP_SELF?session=".$session."&level=1&sstring=");
$urlname=urlencode($tier1);
PRINT $urlname;
PRINT ("\>");
PRINT $tier1;
PRINT ("</a>");
PRINT (": ");
PRINT ("<A
HREF=\" $PHP_SELF?session=".$session."&level=2&sstring=");
$urlname=urlencode($tier2);
PRINT $urlname;
PRINT ("\>");
PRINT $tier2;
PRINT ("</a>");
PRINT (": ");
PRINT $tier3;
PRINT (": ");
PRINT $labname;
PRINT ("<BR><BR>");

PRINT ("<div align=\"center\">");
IF ($image!="")
{
    PRINT displayImage($image, "default");
}
ELSE
{
    PRINT ("No Image Available");
}
PRINT ("</div>");
PRINT ("<BR>");
PRINT ("<TABLE WIDTH=\"520\" CELLPADDING=\"2\"
CELLSPACING=\"2\" BORDER=\"0\"><TR>");
PRINT ("<TD valign=\"top\" width=\"320\">");
PRINT ("<B>NAME:</B> ".$labname);
PRINT ("<BR>");
PRINT ("<B>IDENTIFIER:</b> ".$labnum);
PRINT ("<BR>");
PRINT ("<B># IN CIRCULATION:</b> ".$avail);
PRINT ("<BR>");
PRINT ("<B>DESCRIPTION:<BR></B> ".$descript);
PRINT ("<BR>");
PRINT ("<B>SETUP INFORMATION:<BR></B> ".$setup);

```

```

        PRINT ("</TD>");
        PRINT ("<TD width=\"200\" align=\"center\"
valign=\"top\">");
        IF ($multimedia!="")
        {
            PRINT ("<A HREF=\"\$multimedia\">");
            PRINT ("Multimedia of Demo");
            PRINT ("</a>");
            PRINT ("<BR><BR>");
        }
        PRINT ("<B>Current Reservations</B>");
        IF (authed($session)=='y')
        {
            PRINT ("&nbsp;");
            PRINT ("<a
href=\"\$PHP_SELF?session=$session&level=$level&sstring=$sstring&add=$la
bnum\">");
                PRINT ("<font size=\"-2\">");
                PRINT ("ADD");
                PRINT ("</FONT></A><BR>");
            }
            showItemReserves($labid);
            PRINT ("</TD></TR>");
            PRINT ("</TABLE>");
        }
        # The next two take care of the orderhistory and receipts
        ELSEIF ($level==4)
        {
            IF ($resultarray!="NO ACCESS")
            {
                PRINT ("Receipts from previous transactions by ");

                $name=getUserName($session);

                PRINT userResolve($name);
                PRINT (":");
                PRINT ("<BR><BR>");
                IF (MYSQL_NUM_ROWS($resultarray)==0")
                {
                    PRINT ("You have no previous orders on
record.");
                }
                IF (is_array($resultarray))
                {
                    ELSE
                    {
                        $numrows=MYSQL_NUM_ROWS($resultarray);
                        $now=date("YmdHis");
                        $now2=' $now';
                        PRINT ("<TABLE width=\"400\" BORDER=\"0\"
align=\"center\">");
                            $oldid="";
                            FOR ($x=0;$x<$numrows;$x++)
                                {
                                    $purpose=MYSQL_RESULT($resultarray,$x,'purpose');
                                    $dateorder=MYSQL_RESULT($resultarray,$x,'date_order');

```

```

$dateneed=MYSQL_RESULT($resultarray,$x,'date_needed');
$id=MYSQL_RESULT($resultarray,$x,'receipt_id');
    IF ($oldid!=$id)
    {
        PRINT ("|<TD width=\"300\">");
        PRINT ("

|  |

```

```
}  
%>
```

```
}
```

```
}
```

Function – demoSearch

```

<%
function demoSearch ($session,$level,$sstring)
    {
        $userstable="demotable";

        /*-----Connects to database */
        $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);
        mysql_select_db(DATABASE, $mysql_link);

        IF ($level==1)
            {
                $query="SELECT tier1, tier2 FROM $userstable WHERE
((available>0) AND (tier1='$sstring')) ORDER BY tier2";
                /* If this doesn't work, may need to add available to
SELECT "" */
                $result=MYSQL_QUERY($query, $mysql_link);
            }
        ELSEIF ($level==2)
            {
                $query="SELECT lab_id, tier1, tier2, tier3, name,
number, icon FROM $userstable WHERE ((available>0) AND
(tier2='$sstring')) ORDER BY number";
                $result=MYSQL_QUERY($query, $mysql_link);
            }
        ELSEIF ($level==3)
            {
                $query="SELECT * FROM $userstable WHERE
(number='$sstring')";
                $result=MYSQL_QUERY($query, $mysql_link);
            }
        # the next two take care of the order history and receipts
        ELSEIF ($level==4)
            {
                $userstable="transactions";
                $name=getUserName($session);

                IF ($name==$sstring)
                    {
                        $query="SELECT date_order, purpose, receipt_id,
date_needed FROM $userstable WHERE (user_id='$sstring') ORDER BY
date_order";
                        $result=MYSQL_QUERY($query, $mysql_link);
                    }
                ELSE
                    {
                        $result="NO ACCESS";
                    }
            }
        ELSEIF ($level==5)
            {
                $userstable="receipts";
                $name=getUserName($session);
                $query="SELECT username FROM $userstable WHERE
(id='$sstring')";
            }
    }

```

```

$result=MYSQL_QUERY($query, $mysql_link);
$rname=MYSQL_RESULT($result,0,'username');

IF ($rname==$name)
{
###MAKE BELOW A FUNCTION
$query="SELECT receipt, username FROM $userstable
WHERE (id='$sstring')";
$result=MYSQL_QUERY($query, $mysql_link);
}
ELSE
{
$result="NO ACCESS";
}
}
ELSEIF ($sstring!="")
{
IF ($level==10)
{
$query="SELECT * FROM demotable WHERE ((available>0)
AND ((name LIKE '%$sstring%') OR (tier1 LIKE '%$sstring%') OR (tier2
LIKE '%$sstring%') OR (tier3 LIKE '%$sstring%')) ORDER BY number";
$result=MYSQL_QUERY($query, $mysql_link);
}
ELSEIF ($level==11)
{
$query="SELECT * FROM demotable WHERE
((available>0)";
$query.=" AND (number LIKE '%$sstring%')";
$query.=") ORDER BY number";
$result=MYSQL_QUERY($query, $mysql_link);
}
ELSEIF ($level==12)
{
$query="SELECT * FROM demotable WHERE
((available>0)";
$query.=" AND (name LIKE '%$sstring%')";
$query.=") ORDER BY number";
$result=MYSQL_QUERY($query, $mysql_link);
}
}
RETURN $result;
}

/* Additional ELSEIFs will be added for the search engine
This will allow searches
- by number
- by name
- by areas (words in tier2,tier3)
- by description?
*/
%>

```

Function – displayImage

```

<%
function displayImage($image, $position)
{
    $pictureUrl=IMAGEURL;
    $pictureAfs=IMAGEAFS;
    $pictureUrl.=$image;
    $pictureAfs.=$image;
    IF (is_file($pictureAfs))
        {
            $pictinfo=getimagesize($pictureAfs);
            $width=$pictinfo[0];
            $height=$pictinfo[1];
            $return="<img src=\""$pictureUrl\"" $pictinfo
align=\""$position\"" border=\"0\">";
        }
    ELSE
        # gives a default image when requested one is not available
        {
            $pictureAfs=IMAGEAFS;
            $pictureUrl=IMAGEURL;
            $pictureAfs.=DEMOICONS;
            $pictureUrl.=DEMOICONS;
            $pictinfo=getimagesize($pictureAfs);
            $return="<img src=\""$pictureUrl\"" $pictinfo
align=\""$position\"" border=\"0\">";
        }
    RETURN ($return);
}
%>

```

Function – getAuthed

```

<%
function getAuthed($session,$level,$sstring)
{
    PRINT ("<div align=\"center\">");
        PRINT ("<form ACTION=\"authing.phtml\">");
        PRINT ("<br>");
        PRINT ("Username:<br>");
            PRINT ("<input type=\"text\" size=\"15\"
name=\"username\">");
            PRINT ("<br>");
            PRINT ("Password:<br>");
            PRINT ("<input type=\"password\" size=\"15\"
name=\"pswd\">");
            PRINT ("<br>");
            PRINT ("<input type=hidden name=\"session\"
value=\"$session\">");
            PRINT ("<input type=hidden name=\"level\"
value=\"$level\">");
            PRINT ("<input type=hidden name=\"sstring\"
value=\"$sstring\">");
            PRINT ("<input type=\"submit\" name=\"SUBMIT\"
value=\"Login\">\n");
            PRINT ("</form>");
        PRINT ("</div>");
    }
%>

```

Function – getLabAvailable

```
<%
function getLabAvailable ($labnum)
{
    /*-----Connects to database */
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);
    mysql_select_db(DATABASE, $mysql_link);

    $query="SELECT available FROM demotable WHERE
(number='$labnum')";
    $result=MYSQL_QUERY($query, $mysql_link);
    $available=MYSQL_RESULT($result,0,'available');

    RETURN($available);
}
%>
```

Function – getLabId

```
<%  
function getLabId ($labnum)  
  {  
    /*-----Connects to database */  
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);  
    mysql_select_db(DATABASE, $mysql_link);  
  
    $query="SELECT lab_id FROM demotable WHERE (number='$labnum')";  
    $result=MYSQL_QUERY($query, $mysql_link);  
    $labid=MYSQL_RESULT($result,0,'lab_id');  
    RETURN($labid);  
  }  
%>
```

Function – getLabImage

```
<%  
function getLabImage ($labnum)  
  {  
    /*-----Connects to database */  
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);  
    mysql_select_db(DATABASE, $mysql_link);  
  
    $query="SELECT image FROM demotable WHERE (number='$labnum')";  
    $result=MYSQL_QUERY($query, $mysql_link);  
    $image=MYSQL_RESULT($result,0,'image');  
    RETURN($image);  
  }  
%>
```

Function – getLabLocation

```
<%  
function getLabLocation ($labnum)  
    {  
  
        /*-----Connects to database */  
        $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);  
        mysql_select_db(DATABASE, $mysql_link);  
  
        $query="SELECT location FROM demotable WHERE (number='$labnum')";  
        $result=MYSQL_QUERY($query, $mysql_link);  
        $location=MYSQL_RESULT($result,0,'location');  
        IF ($location=="")  
            {$location="Ask Lab Manager";}  
        RETURN($location);  
    }  
%>
```

Function – getLabName

```
<%  
function getLabName ($labid)  
  {  
    $userstable="demotable";  
    $dbName="labdemos";  
  
    /*-----Connects to database */  
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);  
    mysql_select_db($dbName, $mysql_link);  
  
    $query="SELECT name FROM $userstable WHERE (lab_id='$labid')";  
    $result=MYSQL_QUERY($query, $mysql_link);  
    $name=MYSQL_RESULT($result,0,'name');  
    RETURN($name);  
  }  
%>
```

Function – getLabName2

```
<%  
function getLabName2 ($labnum)  
  {  
    /*-----Connects to database */  
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);  
    mysql_select_db(DATABASE, $mysql_link);  
    $labnumU=strtoupper($labnum);  
    $labnumL=strtolower($labnum);  
    $query="SELECT name FROM demotable WHERE ((number='$labnumU') OR  
(number='$labnumL'))";  
    $result=MYSQL_QUERY($query, $mysql_link);  
    $name=MYSQL_RESULT($result,0,'name');  
    RETURN($name);  
  }  
%>
```

Function – getLabNumber

```
<%  
function getLabNumber ($labid)  
  {  
    $userstable="demotable";  
    $dbName="labdemos";  
  
    /*-----Connects to database */  
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);  
    mysql_select_db($dbName, $mysql_link);  
  
    $query="SELECT number FROM $userstable WHERE (lab_id='$labid')";  
    $result=MYSQL_QUERY($query, $mysql_link);  
    $number=strtolower(MYSQL_RESULT($result,0,'number'));  
    RETURN($number);  
  }  
%>
```

Function – getTransactionDates

```
<%
function getTransactionDates($transaction_id)
{
    /*-----Connects to database */
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);
    mysql_select_db(DATABASE, $mysql_link);

    $query="SELECT date_needed, date_return FROM transactions WHERE
(transaction_id='$transaction_id')";
    $result=MYSQL_QUERY($query, $mysql_link);
    $dateN=MYSQL_RESULT($result,0,'date_needed');
    $dateR=MYSQL_RESULT($result,0,'date_return');
    $date[0]=$dateN;
    $date[1]=$dateR;
    RETURN($date);
}
%>
```

Function – getUserEmail

```
<%  
function getUserEmail ($session)  
{  
    /* CONNECT TO DB */  
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);  
    mysql_select_db(DATABASE, $mysql_link);  
  
    $query="SELECT username FROM session WHERE (ID='$session')";  
    $result=MYSQL_QUERY($query, $mysql_link);  
    $name=MYSQL_RESULT($result,0,'username');  
  
    $query="SELECT email FROM users WHERE (userid='$name')";  
    $result=MYSQL_QUERY($query, $mysql_link);  
    $email=MYSQL_RESULT($result,0,'email');  
  
    RETURN($name);  
}  
%>
```

Function – getUsername

```
<%  
function getUsername ($session)  
{  
    /* CONNECT TO DB */  
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);  
    mysql_select_db(DATABASE, $mysql_link);  
  
    $query="SELECT username FROM session WHERE (ID='$session')";  
    $result=MYSQL_QUERY($query, $mysql_link);  
    $name=MYSQL_RESULT($result,0,'username');  
    RETURN($name);  
}  
%>
```

Page – index.phtml

```

<%
include("admin/config.php");
include("displayimage.php3");
include("reverttimestamp.php3");
include("demosearch.php3");
include("demodisplay.php3");
include("session.php3");
include("getlabname.php3");
include("getlabname2.php3");
include("getauthed.php3");
include("listtier1.php3");
include("authed.php3");
include("getusername.php3");
include("getlabnumber.php3");
include("userresolve.php3");
include("showitemreserves.php3");
include("showreserves.php3");
include("addshoppingitem.php3");
include("delshoppingitem.php3");
include("shoppingcart.php3");
include("chkout.php3");
include("nextfewdays.php3");
include("chkconflicts.php3");
include("getlabid.php3");
include("processorder.php3");
include("getlablocation.php3");
include("gettransactiondates.php3");
include("getuseremail.php3");
include("cancelorder.php3");
include("getlabavailable.php3");

/*-----Connects to database */
$mysql_link=MYSQL_PCONNECT(HOSTNAME,USERNAME,PASSWORD);
mysql_select_db(DATABASE, $mysql_link);

$pageinfo=getenv("QUERY_STRING");
parse_str($pageinfo);

$session=session($session);
$bkgcolor=BKGCOLOR;

IF ($Feedback!="")
{
    ###e. sends email to Lab Manager
    $mail_recip=DEMOEMAIL;
    $mail_subject="FeedBack from Lab Reservation";
    $mail_header="From: Lab Reserve\n";
    $message=$feedbackmessage;

    mail ($mail_recip, $mail_subject, $message, $mail_header);
    $level=0;
}
IF ($add!="")
{

```

```

        addshoppingitem($add, $session);
    }
    IF ($cancel!="")
    {
        cancelorder($cancel, $session);
    }
    IF ($delete!="")
    {
        delshoppingitem($delete, $session);
    }

    IF ($Process)
    {
        IF ($days=="one")
        {
            $timestamp1=$day1;
            $timestamp1.=$hrsout;
            $timestamp1.=$minout;
            $timestamp1.="00";
            $timestamp2=$day1;
            $timestamp2.=$hrsout;
            $timestamp2.=$minout;
            $timestamp2.="00";
        }
        ELSEIF ($days=="many")
        {
            $timestamp1=$day2;
            $timestamp1.=$hrsout2;
            $timestamp1.=$minout2;
            $timestamp1.="00";
            $timestamp2=$day3;
            $timestamp2.=$hrsout2;
            $timestamp2.=$minout2;
            $timestamp2.="00";
        }

        $time=time();
        $currenttime=(date( "YmdHis", $time));

        IF ($timestamp1>=$timestamp2)
        {
            $ChkOut="Invalid Date1";
        }

        ELSEIF ($timestamp1<=$currenttime)
        {
            $ChkOut="Invalid Date2";
        }
        ELSE
        {
            $conflicts=chkconflicts($session,$timestamp1,$timestamp2);
            IF (is_array($conflicts))
            {
                #GO BACK TO THE CHKOUT
                $ChkOut="conflicts";
            }
            ELSEIF ($Process=="Checkout")

```

```

        {
        $ChkOut="Ready";
        }
ELSE
{

    $receipttag=processorder($session,$timestamp1,$timestamp2,$purpose,$room,$delivery,$comments);
    $level=$receipttag[0];
    $sstring=$receipttag[1];
    }
}

%>
<html><head>
<title>Physics and Astronomy Lab Demonstrations</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<link rel="stylesheet" href="admin/directory.css">
</head>

<body bgcolor="#FFFFFF" topmargin="0" MARGINHEIGHT="0">
<div align="center">
<table width="750" vspace="0" cellspacing="0" cellpadding="0"
hspace="0" border="0">
<tr align="left"><td colspan="2">
<table width="100%" border="0" cellspacing="0" cellpadding="0">
<tr><td>
<%
        PRINT ("<a href=\"\$PHP_SELF?session=.\$session.\">");
        PRINT displayImage('demos.gif', 'default');
        PRINT ("</a>");
%>
%>
</td></tr>
        <tr valign="middle" bgcolor="<% PRINT $bgcolor; %>"
        <td colspan="4" valign="middle" NOWRAP align="center">
        <form method="post" action="<% PRINT
($PHP_SELF?session=$session); %>">
        Search Database for:
        <input type="text" name="sstring">
        <select name="level">
        <option value=10 selected>Keyword</option>
        <option value=11>Numbers</option>
        <option value=12>Demo Name</option>
        </select>
        <input type="image" src="images/go2.gif" border="0"
align="absmiddle" name="Submit" value="Submit">
</td></form></tr>
<tr><td>

<%
PRINT ("<map name=\"demos\">");
PRINT ("<area shape=\"rect\" coords=\"0,0,82,17\"
href=\"\$PHP_SELF?session=.\$session.\">");
PRINT ("<area shape=\"rect\" coords=\"83,0,162,17\"
href=\"\$PHP_SELF?session=.\$session.&level=9&sstring=Feedback\">");

```



```

listtier1($session);
%>
</td></tr>
<tr><td bgcolor="<% PRINT $bgcolor;%>">
<%
$auth=authed($session);
        IF ($auth=='y')
            {
                PRINT ("<a name=\"login\"></a>");
                PRINT ("&nbsp;");
                PRINT ("User Information</td></tr>");
                PRINT ("<tr><td>");
                PRINT ("<div align=\"center\">");
                $name=getUserName($session);
                PRINT ("Welcome ");
                PRINT userResolve($name);
                PRINT ("<BR>");
                PRINT ("<a
href=\".$PHP_SELF?session= ".$session."&level=4&sstring= ".$name.">");
                PRINT ("<font size=\"-1\">");
                PRINT ("Orders");
                PRINT ("</font>");
                PRINT ("</a>");
                PRINT ("<BR>");
                showReserves($session,$name);
                PRINT ("</div>");
            }
        ELSE
            {
                PRINT ("<a name=\"login\"></a>");
                PRINT ("&nbsp;");
                PRINT ("User Login</td></tr>");
                PRINT ("<tr><td>");
                getAuthed($session,$level,$sstring);
            }
    %>
</td></tr>
</table>
</td>
<TD width="560" valign="top" align="left">
<BR>
<%
IF ($ChkOut)
    {
        chkout($session, $profile, $ChkOut, $purpose, $room, $comments,
        $timestamp1, $timestamp2, $delivery, $conflicts);
    }
ELSE
    {
        IF ($sstring=="") {$level=0;}
        $demoresult=demoSearch($session,$level,$sstring);
        demoDisplay($session,$level,$demoresult,$sstring);
    }
%>
</TD></tr>
</table>
</div>

```

```
</body></html>
```

Function – listTier1

```

<%
function listTier1($session)
{
    /*-----Connects to database */
    $mysql_link=MYSQL_PCONNECT(HOSTNAME,USERNAME,PASSWORD);
    mysql_select_db(DATABASE, $mysql_link);

    $query="SELECT tier1, COUNT(*) FROM demotable WHERE (available>0)
GROUP BY tier1 ORDER BY tier1";
    $result=MYSQL_QUERY($query, $mysql_link);

    $numrows=MYSQL_NUM_ROWS($result);

    PRINT ("<span class=\"listtier1\">");

    FOR ($x=0;$x<$numrows;$x++)
    {
        $name=MYSQL_RESULT($result,$x,'tier1');
        $num=MYSQL_RESULT($result,$x,'COUNT(*)');
        PRINT ("<A
HREF=\"".$PHP_SELF."?session=".$session."&level=1&sstring=");
        $urlname=urlencode($name);
        PRINT $urlname;
        PRINT ("\>");
        PRINT ("<font size=\"-1\">");
        PRINT $name;
        #PRINT (" ($num)");
        PRINT ("</font>");
        PRINT ("</a>");
        PRINT ("<BR>");
    }
    PRINT ("</span>");
}

```

Function – nextfewdays

```
<%  
function nextfewdays($numdays,$day)  
{  
    $time=time();  
    FOR ($x=0;$x<$numdays;$x++)  
    {  
        $opt="";  
        $dateprt=(date( "D, F dS, Y", $time));  
        $datepass=date("Ymd",$time);  
        IF ($datepass==$day) {$opt=" SELECTED";}  
        PRINT ("<option  
value=\" $datepass\" $opt>$dateprt</option>");  
        $time=$time+86400;  
    }  
    RETURN;  
}  
%>
```

Function – processorder

```

<%
function processorder
($session,$timestamp1,$timestamp2,$purpose,$room,$delivery,$comments)
{
#           a. creates receipt
#           b. enters receipt into receipt db
#           c. gets the receipt_id
#           d. enters the demos into transaction log with all
data
#           d2. clears shopping cart.
#           e. sends email to Lab Manager
#           f. sends confirmation email to profs
#           g. redirects user to
labs.phtml?session=$session&level=5&sstring=$receipt_id
#           a. creates receipt

/* -----Connects to database */
$mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
mysql_select_db(DATABASE, $mysql_link);

####VARIABLES

$username=getUserName($session);
$timef=date("YmdHis");
$datef=date("F dS, Y - h:i:sA",revertTimeStamp($timef));
$datew=date("F dS, Y - h:iA",revertTimeStamp($timestamp1));
$dater=date("F dS, Y - h:iA",revertTimeStamp($timestamp2));

$query="SELECT item FROM $session ORDER BY item";
$result=MYSQL_QUERY($query, $mysql_link);

$fullname=userResolve($username);

IF (MYSQL_NUM_ROWS($result)!=0)
{
####CREATES RECEIPT
$receipt="<BR>Userid: $username, $fullname";
$receipt.="<BR>Date: ".$datef."";
$receipt.="<BR>Purpose: ".$purpose."<BR>";
$receipt.="<BR>";
$receipt.="Reserved Date: ".$datew."<BR>";
$receipt.="Return Date: ".$dater."<BR><BR>";
$receipt.="<TABLE WIDTH=\"500\" BORDER=\"0\">";
IF (MYSQL_NUM_ROWS($result)!=0)
{
FOR ($x=0;$x<MYSQL_NUM_ROWS($result);$x++)
{
$item=MYSQL_RESULT($result,$x,'item');
$name=getLabName2($item);
$receipt.="<TR><TD valign=\"top\" width=\"50\">";
$receipt.=$item;
$receipt.="</TD><TD width=\"200\">";
$receipt.=" - ";
$receipt.=$name;

```

```

$receipt.="</TD><TD width=\"250\">";
IF ($delivery[all]=="y") {$delivery[$item]="y";}
IF ($delivery[$item]=="y")
{
    $receipt.="          | DELIVER TO ".$room."<BR>";
}
ELSE
{
    $location=getLabLocation($item);
    $receipt.="          | LOCATION:
".$location."<BR>";
}
$receipt.="</TD></TR>";
}
}
$receipt.="<TR><TD colspan=\"3\">";
$receipt.="<BR>Comments<BR>";
IF ($comments=="") {$comments="None.";}
$receipt.=$comments;
$receipt.="</TD></TR>";
$receipt.="</TABLE>";
$receipt=addslashes($receipt);

###b. enters receipt into receipt db - will need to add username
to VALUES
$query="INSERT INTO receipts VALUES
(NULL, '$receipt', '$username')";
$result=MYSQL_QUERY($query, $mysql_link);

###c. gets the receipt_id
$query="SELECT id FROM receipts WHERE (receipt='$receipt')";
$result=MYSQL_QUERY($query, $mysql_link);
$receiptid=MYSQL_RESULT($result, 0, 'id');

# Start a loop here to enter each lab separate - use $i as
counter

$query="SELECT item FROM $session ORDER BY item";
$result=MYSQL_QUERY($query, $mysql_link);
FOR ($i=0;$i<MYSQL_NUM_ROWS($result);$i++)
{
    $item=MYSQL_RESULT($result,$i,'item');
    $id=getLabId($item);
    $deliv=$delivery[$item];
    IF ($deliv=="y") {$deliv=$room;}
    ELSE {$deliv="PKU";}
    #d. enters the demos into transaction log with all data
    $query5="INSERT INTO transactions VALUES
(NULL, '$username', '$id', '$timestamp1', '$timestamp2', '$purpose', '$deliv',
'$timef', '$receiptid')";
    $result5=MYSQL_QUERY($query5, $mysql_link);
}
}
####SEND EMAIL TO LABMANAGER

```

```

###e. sends email to Lab Manager
$mail_recip=DEMOEMAIL;
$mail_subject="Reservation Email from Lab Reservation";
$mail_header="From: Lab Reserve\n";
$message="User ".$username." ( ".$fullname.") \nHas requested the
following demos: \n\nFrom: ".$datew." \nUntil: ".$dater." \n\nFor the
purpose: ".$purpose."\n";
$message.=" \n";
IF (MYSQL_NUM_ROWS($result)!=0)
{
    FOR ($x=0;$x<MYSQL_NUM_ROWS($result);$x++)
    {
        $item=MYSQL_RESULT($result,$x,'item');
        $name=getLabName2($item);
        $message.=$item;
        $message.=" - ";
        $message.=$name;
        IF ($delivery[all]=="y") {$delivery[$item]="y";}
        IF ($delivery[$item]=="y")
        {
            $message.="          | DELIVER TO ".$room."\n";
        }
        ELSE
        {
            $location=getLabLocation($item);
            $message.="          | LOCATION: ".$location."\n";
        }
    }
}

$message.="Comments\n";
IF ($comments=="") {$comments="None.";}
$message.=$comments;
IF (MYSQL_NUM_ROWS($result)!=0)
{
    $message.=" \nView the Order:\n";
    $message.=DIRECTORY;
    $message.="admin/index.phtml?area=r&sstring=";
    $message.=$receiptid;
}

mail ($mail_recip, $mail_subject, $message, $mail_header);

####SEND EMAIL TO PROF
###f. sends confirmation email to profs
# get the profs email.
$mail_recip=getUserEmail($session);

$mail_subject="Confirmation Email from Lab Reservation";
$mail_header="From: Lab Reserve\n";

$message="You have successfully ordered the following demos for
".$datew."\n";

IF (MYSQL_NUM_ROWS($result)!=0)
{
    FOR ($x=0;$x<MYSQL_NUM_ROWS($result);$x++)

```

```

        {
        $item=MYSQL_RESULT($result,$x,'item');
        $name=getLabName2($item);
        $message.=$item;
        $message.=" - ";
        $message.=$name;
        IF ($delivery[all]=="y") {$delivery[$item]="y";}
        IF ($delivery[$item]=="y")
            {
            $message.="          | WILL BE DELIVERED TO
". $room. ".\n";
            }
        ELSE
            {
            $location=getLabLocation($item);
            $message.="          | IS LOCATED AT:
". $location. "\n";
            }
        }
    }
    $message.="\nComments\n";
    IF ($comments=="") {$comments="None.";}
    $message.=$comments;

    $message.="\n\nPlease return those demos which have not been
delivered to the Lab Storeroom by ".$dater."\n";

    mail ($mail_recip, $mail_subject, $message, $mail_header);

    #####CLEAR THE SHOPPING BASKET

    $dquery="DELETE FROM $session";
    $dresult=MYSQL_QUERY($dquery, $mysql_link);

    #####REDIRECT (RETURN THE CORRECT LEVEL AND RECEIPT ID) TO THE
INDEX

    IF (MYSQL_NUM_ROWS($result)!=0)
    {
    #g. redirects user to
labs.phtml?session=$session&level=5&sstring=$receipt_id
    $level=5;
    $levelreceipt[0]=$level;
    $levelreceipt[1]=$receiptid;
    }
    ELSE
    {
    $level=0;
    }
    RETURN($levelreceipt);
    }
%>
```

Function – revertTimeStamp

```
<%  
function revertTimeStamp($timestamp)  
  {  
    $year=substr($timestamp,0,4);  
    $month=substr($timestamp,4,2);  
    $day=substr($timestamp,6,2);  
    $hour=substr($timestamp,8,2);  
    $minute=substr($timestamp,10,2);  
    $second=substr($timestamp,12,2);  
    $newdate=mktime($hour,$minute,$second,$month,$day,$year);  
    RETURN ($newdate);  
  }  
%>
```

Function – session

```

<%
function session($session)
{
    /*
    ** Uses session identifiers
    */

    // generates a session id
    function SessionID($length=8)
    {
        /*
        ** Set pool of possible characters
        */
        $Pool = "ABCDEFGHIJKLMNOPQRSTUVWXYZ";
        $Pool .= "abcdefghijklmnopqrstuvwxyz";

        for($index = 0; $index < $length; $index++)
        {
            $sid .= substr($Pool,
                (rand()%(strlen($Pool))), 1);
        }

        return($sid);
    }

    // Seed the generator
    srand(time());

    //set up connection to database
    $mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
    mysql_select_db(DATABASE, $mysql_link);
    $olddate=date("YmdHis", (time()-7200));
    //clear out any old sessions
    $Query="SELECT ID FROM session WHERE (LastAction < '$olddate')";
    $result=mysql_query($Query, $mysql_link);
    IF (MYSQL_NUM_ROWS($result)!=0)
    {
        FOR ($x=0;$x<MYSQL_NUM_ROWS($result);$x++)
        {
            $id=MYSQL_RESULT($result,$x,'ID');
            $dquery="DELETE FROM session WHERE (ID='$id)";
            $dresult=mysql_query($dquery, $mysql_link);
            $dtableq="DROP TABLE";
            $dtableq.=" ";
            $dtableq.=$id;
            $dtabler=mysql_query($dtableq, $mysql_link);
        }
    }

    # //check session
    # if(isset($session))
    # {

        //we have a session, so check it

```

```

$query="SELECT * FROM session WHERE (ID='$session')";
$mysql_result = mysql_query($query, $mysql_link);
IF (MYSQL_NUM_ROWS($mysql_result)!=0)
{
    //session exists, update last action

    $timef=date(YmdHis);
    $query="UPDATE session SET LastAction='$timef' WHERE
(ID='$session')";
    $result=mysql_query($query, $mysql_link);
}
ELSEIF (MYSQL_NUM_ROWS($mysql_result)==0)
{
    //session is bad
    $session="";
}
# }

//if session is empty, we need to create it
if($session=="")
{

    //no session, so create one
    $session = SessionID(8);

    //insert session to database
    $query="INSERT INTO session VALUES
('$session',NULL,NULL,NULL)";
    $result=mysql_query($query, $mysql_link);

    //Create A Shopping Cart Table With the Same Name
    $query="CREATE TABLE";
    $query.=" " ;
    $query.=$session;
    $query.=" (item VARCHAR (10) not null , PRIMARY KEY
(item))";
    $result=mysql_query($query, $mysql_link);
}

RETURN($session);
}
%>

```

Function – shoppingcart

```

<%
function shoppingcart($session,$level,$sstring)
{
    /* -----Connects to database */
    $mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
    mysql_select_db(DATABASE, $mysql_link);

    /*display query */
    $query="SELECT item FROM $session ORDER BY item";
    $result=MYSQL_QUERY($query, $mysql_link);
    IF (MYSQL_NUM_ROWS($result)==0)
    {
        PRINT ("<div align=\"center\">");
        PRINT ("Empty");
        PRINT ("</div>");
    }
    ELSE
    {
        $sstring=urlencode($sstring);
        FOR ($x=0;$x<MYSQL_NUM_ROWS($result);$x++)
        {

            $item=MYSQL_RESULT($result,$x,'item');
            $name=getLabName2($item);
            $name=substr($name,0,21);
            PRINT ("<font size=\"-1\">");
            PRINT $name;
            PRINT ("</font>");
            PRINT (" ");
            PRINT ("<font size=\"-2\">");
            PRINT ("<a
href=\"\$PHP_SELF?session=$session&level=$level&sstring=$sstring&delete=
$item\">");

                PRINT ("Del");
                PRINT ("</a>");
                PRINT ("</font>");
                PRINT ("<BR>");
            }
        }
        PRINT ("</td></tr><tr><td>");
        PRINT ("<form method=\"post\"
action=\"\$PHP_SELF?session=$session\">");
        ###GET PROFILES
        $user=getUserName($session);
        $query="SELECT * FROM profiles WHERE userid='$user'";
        $result=MYSQL_QUERY($query, $mysql_link);
        PRINT ("<div align=\"center\">");
        PRINT ("<select name=\"profile\">");

        IF (MYSQL_NUM_ROWS($result)!=0)
        {
            FOR ($c=0;$c<MYSQL_NUM_ROWS($result);$c++)
            {
                $id=MYSQL_RESULT($result,$c,'id');
            }
        }
    }
}

```


Function – showItemReserves

```

<%
function showItemReserves ($labid)
{
    $userstable="transactions";
    $dbName="labdemos";

    /* -----Connects to database */
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);
    mysql_select_db($dbName, $mysql_link);

    $now=date(YmdHis);

    $query="SELECT purpose, date_needed, date_return FROM $userstable
WHERE ((lab_id=$labid) AND (date_needed>'$now')) ORDER BY date_needed";
    $result=MYSQL_QUERY($query, $mysql_link);
    $numrows=MYSQL_NUM_ROWS($result);
    PRINT ("<TABLE CELLSPACING=\"0\" CELLPADDING=\"0\"
BORDER=\"0\">");

    IF (MYSQL_NUM_ROWS($result)=="0")
    {
        PRINT ("Not Currently Reserved");
    }
    ELSE
    {
        FOR ($x=0;$x<$numrows;$x++)
        {
            PRINT ("<TR>");
            $date=MYSQL_RESULT($result,$x,'date_needed');
            $dater=MYSQL_RESULT($result,$x,'date_return');
            $purpose=MYSQL_RESULT($result,$x,'purpose');
            $date=revertTimeStamp($date);
            $dater=revertTimeStamp($dater);
            $date=date("M jS h:iA",$date);
            $dater=date("M jS h:iA",$dater);
            PRINT ("<TD width=\"70\">");
            PRINT ("<span class=\"showreserves\">");
            PRINT $purpose;
            PRINT ("</span>");
            PRINT ("</TD>");
            PRINT ("<TD width=\"130\">");
            PRINT ("<span class=\"showreserves\">");
            PRINT $date;
            PRINT ("<BR>-");
            PRINT $dater;
            PRINT ("</span>");
            PRINT ("</TD>");
            PRINT ("</TR>");
        }
    }
    PRINT ("</TABLE>");
}
%>

```

Function – showReserves

```

<%
function showReserves ($session,$name)
    {
        $userstable="transactions";

        /* -----Connects to database */
        $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);
        mysql_select_db(DATABASE, $mysql_link);

        $now=date(YmdHis);

        $query="SELECT lab_id, date_needed, receipt_id FROM $userstable
WHERE ((user_id='$name') AND (date_needed>'$now')) ORDER BY
date_needed";
        $result=MYSQL_QUERY($query, $mysql_link);

#       IF (is_array($result))
#           {
                IF (MYSQL_NUM_ROWS($result)==="0")
                    {
                        PRINT ("<font size=\"-1\">");
                        PRINT ("No Outstanding Orders");
                        PRINT ("</font>");
                    }
                ELSE
                    {
                        PRINT ("Next 5 Reservations<BR>");
                        $numrows=MYSQL_NUM_ROWS($result);
                        IF ($numrows>5) {$numrows=5;} #limits the amount shown
                        PRINT ("<TABLE CELLSPACING=\"0\" CELLPADDING=\"0\"
BORDER=\"0\">");

                            FOR ($x=0;$x<$numrows;$x++)
                                {
                                    $labid=MYSQL_RESULT($result,$x,'lab_id');
                                    $receipt=MYSQL_RESULT($result,$x,'receipt_id');
                                    $number=getLabNumber($labid);
                                    $name=getLabName($labid);
                                    $date=MYSQL_RESULT($result,$x,'date_needed');
                                    $date=revertTimeStamp($date);
                                    $datef=date("m",$date);
                                    $datef2=date("j",$date);
                                    PRINT ("<TR><TD align=\"left\">");

                                        PRINT ("<A
HREF=\" $PHP_SELF?session=".$session."&level=3&sstring=");
                                        PRINT $number;
                                        PRINT ("\">");
                                        IF (strlen($name)>13)
                                            {
                                                $name=substr($name,0,13);
                                                $name.="...";
                                            }
                                }
                    }
            }
    }

```

```

        PRINT ("<font size=\"-1\">");
        PRINT $name;
        PRINT ("</font>");
        PRINT ("</a>");
        PRINT (" ");
        PRINT ("</TD>");
        PRINT ("<TD valign=\"bottom\">");

        PRINT ("&nbsp;");
        PRINT ("<A
HREF=\"\$PHP_SELF?session=".$session."&level=5&sstring=");
        PRINT $receipt;
        PRINT ("\>");
        PRINT ("<font size=\"-2\">");
        PRINT $datef;
        PRINT ("/");
        PRINT $datef2;
        PRINT ("</font>");
        PRINT ("</a>");

        PRINT ("</TD>");
        PRINT ("</TR>");
    }
    PRINT ("</TABLE>");
}
#
# ELSE
#
# {
# PRINT ("No Outstanding Reservations");
#
# }
%>

```

Function – userResolve

```
<%  
function userResolve($userid)  
{  
    /* -----Connects to database */  
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);  
    mysql_select_db($dbName, $mysql_link);  
  
    /*queries */  
    $query="SELECT fullname FROM users WHERE (userid='$userid')";  
    $result=MYSQL_QUERY($query, $mysql_link);  
    $fullname=MYSQL_RESULT($result,0,'fullname');  
  
    RETURN ($fullname);  
}  
%>
```

Function – admin/adddemo

```

<%
function adddemo($result, $area, $mode)
{
%>

<table border="0" cellspacing="0" cellpadding="0" width="600"
align="center" bordercolor="#CCCCFF" bordercolorlight="#CCCCFF"
bordercolordark="#6666FF">
  <tr>
    <td height="28" valign="bottom"></td><TD>

      <%

        PRINT ("<td align=\"right\" valign=\"bottom\" height=\"37\" nowrap
width=\"183\">");

      %>
      <div align="right"><b>
      <%

        PRINT ("<form method=\"POST\"
action=\"\"$PHP_SELF?area=$area&mode=$mode&sstring=$sstring\">");

        PRINT ("<input type=\"text\" name=\"name\" size=\"40\"
value=\"\"$name\">");

      %>
      </b> </div>

    </tr>
    <tr bgcolor="#FEFDE4">
      <td valign="middle" height="31" colspan="3"> <%

        PRINT ("<select name=\"tier1\">");
        PRINT ("<OPTION value=\"Astronomy & Astrophysics\">Astronomy &
Astrophysics");
        PRINT ("<OPTION value=\"Electricity & Magnetism\">Electricity &
Magnetism");
        PRINT ("<OPTION value=\"Fluid Mechanics\">Fluid Mechanics");
        PRINT ("<OPTION value=\"Mechanics\">Mechanics");
        PRINT ("<OPTION value=\"Modern Physics\">Modern Physics");
        PRINT ("<OPTION value=\"Optics\">Optics");
        PRINT ("<OPTION value=\"Thermodynamics\">Thermodynamics");
        PRINT ("<OPTION value=\"Waves & Oscillations\">Waves &
Oscillations");

        PRINT ("</select>");

      %>
      </td>
    <td valign="middle" height="31" width="183">
      <div align="right"><B> </B></div>

```

```

    </td>
</tr>
<tr bgcolor="#FEFDE4">
  <td height="127" width="56" align="center" valign="top"> <br>
  </td>
  <td height="127" width="278" align="center" valign="top">
    <div align="left"> <br>
      <table border="1" cellspacing="0" cellpadding="0">
        <tr>
          <td valign="top" width="110" nowrap>Tier2:</td>
          <td nowrap><b> <%
              PRINT ("<input type=\"text\" size=\"20\" name=\"tier2\"
value=\"\$tier2\">");
              %> </b></td>
        </tr>
        <tr>
          <td width="110" nowrap>Tier3:</td>
          <td nowrap><b> <%
              PRINT ("<input type=\"text\" size=\"20\" name=\"tier3\"
value=\"\$tier3\">");
              %></b></td>
        </tr>
        <tr>
          <td width="110" nowrap>PIRA:</td>
          <td nowrap><b> <%
              PRINT ("<input type=\"text\" size=\"10\" name=\"number\"
value=\"\$number\">");
              %></b></td>
        </tr>
        <tr>
          <td width="110" nowrap>Available:</td>
          <td nowrap><b> <%
              PRINT ("<input type=\"text\" size=\"5\" name=\"available\"
value=\"\$available\">");
              %></b></td>
        </tr>
        <tr>
          <td width="110" nowrap>Location:</td>
          <td nowrap><b><%
              PRINT ("<input type=\"text\" size=\"20\" name=\"location\"
value=\"\$location\">");
              %></b></td>
        </tr>
      </table>
    <br>
    <table border="1" cellspacing="0" cellpadding="0">
      <tr>
        <td valign="top" colspan="2" nowrap>Setup:</td>
      </tr>
      <tr>
        <td valign="top" colspan="2" nowrap><b><%

```

```

        PRINT ("<textarea name=\"setup\" cols=\"30\"
rows=\"5\">$setup</textarea>");
        %></b></td>
    </tr>
</table>
<br>
</div>
</td>
<td height="127" colspan="2" valign="top">
    <div align="left"><br>
        <table border="1" cellspacing="0" cellpadding="0">
            <tr>
                <td valign="top" width="85" nowrap>Icon:</td>
                <td nowrap><b>
                    <%
PRINT ("<input type=\"text\" size=\"20\" name=\"icon\"
value=\"$icon\">");
                    %></b></td>
            </tr>
            <tr>
                <td width="85" nowrap>Image:</td>
                <td nowrap><b>
                    <%
PRINT ("<input type=\"text\" size=\"20\" name=\"image\"
value=\"$image\">");
                    %></b></td>
            </tr>
            <tr>
                <td width="85" nowrap>Multimedia:</td>
                <td nowrap><b>
                    <%
PRINT ("<input type=\"text\" size=\"20\"
name=\"multimedia\" value=\"$multimedia\">");
                    %></b></td>
            </tr>
        </table>
        <br>
        <table border="1" cellspacing="0" cellpadding="0">
            <tr>
                <td valign="top" width="85" nowrap>Description:</td>
            </tr>
            <tr>
                <td width="85" nowrap><b><%
PRINT ("<textarea name=\"description\" cols=\"30\"
rows=\"5\">$description</textarea>");
                %></b></td>
            </tr>
        </table>
        <br>
    </div>
</td>
</tr>
<tr bgcolor="#FEFDE4">
    <td height="34" width="56">
        <div align="center"></div>
    </td>

```


Function – admin/brokendemo

```

<%
function brokendemo($number)
{
    /* -----Connects to database */
    $mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
    mysql_select_db(DATABASE, $mysql_link);

    $date=date("Ymdhis");
    /*queries */

    $query="UPDATE demotable SET available=(available-1) WHERE
number='$number'";
    $result=MYSQL_QUERY($query, $mysql_link);

    $query2="SELECT lab_id FROM demotable WHERE number='$number'";
    $result2=MYSQL_QUERY($query2, $mysql_link);
    $lab_id=MYSQL_RESULT($result2,0,'lab_id');

    ##PERHAPS LATER
    #$query3="SELECT username, date_needed FROM transactions WHERE
((lab_id=$lab_id) AND (date_needed>$datef));
    #$result3=MYSQL_QUERY($query3, $mysql_link);

    ###SEND MAIL TO USERS WAITING TO USE DEMO.

    RETURN;
}
%>

```

Page – admin/config

```
<%  
define ("HOSTNAME", "***WITHHELD FOR SECURITY***");  
define ("USERNAME", "***WITHHELD FOR SECURITY***");  
define ("PASSWORD", "***WITHHELD FOR SECURITY***");  
define ("AUSERNAME", "***WITHHELD FOR SECURITY***");  
define ("APASSWORD", "***WITHHELD FOR SECURITY***");  
define ("IMAGEURL", "http://www.physics.unc.edu/demos/images/");  
define ("IMAGEAFS", "/afs/physics/www/demos/images/");  
define ("DIRECTORY", "http://www.physics.unc.edu/demos/");  
define ("DATABASE", "labdemos");  
define ("BKGCOLOR", "#98A9E0");  
define ("DEMOICONS", "noicon.gif");  
define ("DEMOEMAIL", "user@physics.unc.edu");  
%>
```

Function – admin/display

```

<%
function directdisplay($result, $mode, $area, $sstring)
{
    #DISPLAY
    IF (MYSQL_NUM_ROWS($result)!=0)
    {
        $numids=MYSQL_NUM_ROWS($result);
    }
    IF ($area=='u')
    {
        PRINT ("<TR><TD>");
        IF ($sstring=="")
        {
            FOR ($x=0;$x<MYSQL_NUM_ROWS($result);$x++)
            {
                IF ($x>0) {PRINT (" - ");}
                $cat=MYSQL_RESULT($result,$x,'category');
                $num=MYSQL_RESULT($result,$x,'COUNT(*)');
                PRINT ("<a
href=\"\$PHP_SELF?area=$area&mode=$mode&sstring=$cat\">");
                PRINT (" $cat ($num)");
                PRINT ("</a>");
            }
        }
        ELSEIF (($sstring>0) AND ($sstring<1000))
        {
            $name=MYSQL_RESULT($result,0,'name');
            $function=MYSQL_RESULT($result,0,'function');
            PRINT ("<CENTER><B>$name</B></CENTER><BR><BR>");
            eval($function);
        }
        ELSE
        {
            $cat=MYSQL_RESULT($result,0,'category');
            PRINT (" $cat Functions<BR><BR>");
            FOR ($x=0;$x<MYSQL_NUM_ROWS($result);$x++)
            {
                IF ($x>0) {PRINT (" | ");}
                $name=MYSQL_RESULT($result,$x,'name');
                $id=MYSQL_RESULT($result,$x,'id');
                PRINT ("<a
href=\"\$PHP_SELF?area=$area&mode=$mode&sstring=$id\">");
                PRINT (" $name");
                PRINT ("</a>");
            }
        }
        PRINT ("</TD></TR></TABLE>");
    }
    ELSEIF ($area=='d')

```

```

{
###THE TODO (BROKEN / MODIFY) LIST
PRINT ("<TR>");
PRINT ("<TD colspan=\"5\" align=\"center\"><B>");
PRINT MYSQL_NUM_ROWS($result);
PRINT (" Item(s).");
PRINT ("</B><BR></TD></TR>");
PRINT ("<TR>");
PRINT ("<TD width=\"100\">");
PRINT ("<b>Date Entered</b>");
PRINT ("</TD>");
PRINT ("<TD width=\"125\">");
PRINT ("<B>Broken/Modify</b>");
PRINT ("</TD>");
PRINT ("<TD width=\"100\">");
PRINT ("<B>PIRA</B>");
PRINT ("</TD>");
PRINT ("<TD width=\"350\" nowrap>");
PRINT ("<B>Problem</b>");
PRINT ("</TD>");
PRINT ("<TD align=\"right\" width=\"25\" nowrap>");
PRINT ("");
PRINT ("</TD>");
PRINT ("</tr>");

# INFORMATION GATHERED HERE
FOR ($x=0; $x<$numids; $x++)
{
$id=MYSQL_RESULT($result,$x,'id');
$number=MYSQL_RESULT($result,$x,'number');
$borm=MYSQL_RESULT($result,$x,'borm');
$problem=MYSQL_RESULT($result,$x,'problem');
$date=MYSQL_RESULT($result,$x,'date_entered');
$did=getLabId($number);
$date=date("m/d/y H:i",revertTimeStamp($date));

#PRINTING OF INFORMATION
PRINT ("<TR><TD nowrap>");

PRINT (" $date");

PRINT ("</TD>");
PRINT ("<TD>");
IF ($borm=="b") {$borm="Broken";}
IF ($borm=="m") {$borm="Modify";}
PRINT $borm;

PRINT ("</TD>");
PRINT ("<TD>");
PRINT ("<A
href=\"$PHP_SELF?area=99&mode=$mode&sstring=$did\">");
PRINT (" $number");
PRINT ("</a>");
PRINT ("</TD>");
PRINT ("<TD>");

PRINT (" $problem");

```

```

        PRINT ("</TD>");
        PRINT ("<TD align=\"right\">");
        PRINT ("<font size=\"-1\">");
        PRINT ("<A
HREF=\"\$PHP_SELF?area=d&mode=$mode&ToDoDone=$id\">");
        PRINT ("Fixed");
        PRINT ("</a>");
        PRINT ("</FONT>");
        PRINT ("</TD>");
        PRINT ("</tr>");
    }
}
ELSEIF ($area=='s')
{
    ###THE USERS LIST

        PRINT ("<TR>");
        PRINT ("<TD colspan=\"6\" align=\"center\"><B>");
        PRINT $numids;
        PRINT (" Users.");
        PRINT ("</B><BR></TD></TR>");
        PRINT ("<TR>");
        PRINT ("<TD width=\"100\">");
        PRINT ("<b>UserID</b>");
        PRINT ("</TD>");
        PRINT ("<TD width=\"150\">");
        PRINT ("<B>Password</b>");
        PRINT ("</TD>");
        PRINT ("<TD width=\"100\">");
        PRINT ("<B>Full Name</B>");
        PRINT ("</TD>");
        PRINT ("<TD width=\"100\" nowrap>");
        PRINT ("<B>Email</b>");
        PRINT ("</TD>");
        PRINT ("<TD align=\"right\" width=\"25\" nowrap>");
        PRINT ("");
        PRINT ("</TD>");
        PRINT ("</tr>");
        PRINT ("<form method=\"POST\"
action=\"\$PHP_SELF\">");
        PRINT ("<TR><TD nowrap>");
        PRINT ("<input type=\"text\" name=\"userid\">");
        PRINT ("</TD>");
        PRINT ("<TD>");
        PRINT ("<input type=\"text\" name=\"passwd\">");
        PRINT ("</TD>");
        PRINT ("<TD>");
        PRINT ("<input type=\"text\" name=\"fullname\">");
        PRINT ("</TD>");
        PRINT ("<TD>");
        PRINT ("<input type=\"text\" name=\"email\">");
        PRINT ("</TD>");
        PRINT ("<TD align=\"right\">");
        PRINT ("<input type=\"submit\" name=\"EditUsers\"
value=\"add\">");
        PRINT ("</TD>");

```

```

PRINT ("</tr>");
PRINT ("</form>");
# INFORMATION GATHERED HERE
FOR ($x=0; $x<$numids; $x++)
{
    $userid=MYSQL_RESULT($result,$x,'userid');
    $passwd=MYSQL_RESULT($result,$x,'passwd');
    $fullname=MYSQL_RESULT($result,$x,'fullname');
    $email=MYSQL_RESULT($result,$x,'email');

    #PRINTING OF INFORMATION
    PRINT ("<form method=\"POST\"
action=\""$PHP_SELF\"">");
    PRINT ("<TR><TD nowrap>");
    PRINT ("<input type=\"text\" name=\"userid\"
value=\""$userid\"">");
    PRINT ("</TD>");
    PRINT ("<TD>");
    PRINT ("<input type=\"text\" name=\"passwd\"
value=\""$passwd\"">");
    PRINT ("</TD>");
    PRINT ("<TD>");
    PRINT ("<input type=\"text\" name=\"fullname\"
value=\""$fullname\"">");
    PRINT ("</TD>");
    PRINT ("<TD>");
    PRINT ("<input type=\"text\" name=\"email\"
value=\""$email\"">");
    PRINT ("</TD>");
    PRINT ("<TD align=\"right\">");
    PRINT ("<input type=\"submit\"
name=\"EditUsers\" value=\""$userid\"">");
    PRINT ("</TD>");
    PRINT ("</form>");
    PRINT ("<form method=\"POST\"
action=\""$PHP_SELF\"">");
    PRINT ("<TD align=\"right\">");
    PRINT ("<input type=\"hidden\" name=\"userid\"
value=\""$userid\"">");
    PRINT ("<input type=\"submit\"
name=\"DelUsers\" value=\"Del\">");
    PRINT ("</TD>");
    PRINT ("</tr>");
}
}
ELSEIF ($area=='l')
{
    ###THE PROFILES LIST

    PRINT ("<TR>");
    PRINT ("<TD colspan=\"6\" align=\"center\"><B>");
    PRINT $numids;
    PRINT (" Profiles.");
    PRINT ("</B><BR></TD></TR>");
    PRINT ("<TR>");
    PRINT ("<TD width=\"100\">");

```

```

PRINT ("UserID");
PRINT ("</TD>");
PRINT ("<TD width=\"150\">");
PRINT ("Purpose");
PRINT ("</TD>");
PRINT ("<TD width=\"150\">");
PRINT ("Room");
PRINT ("</TD>");
PRINT ("<TD width=\"100\">");
PRINT ("Time Start");
PRINT ("</TD>");
PRINT ("<TD width=\"100\" nowrap>");
PRINT ("Time End");
PRINT ("</TD>");
PRINT ("<TD align=\"right\" width=\"25\" nowrap>");
PRINT ("");
PRINT ("</TD>");
PRINT ("</tr>");
PRINT ("<form method=\"POST\"
action=\"$_PHP_SELF\">");
PRINT ("<TR><TD nowrap>");
PRINT ("<input type=\"text\" name=\"userid\">");
PRINT ("</TD>");
PRINT ("<TD>");
PRINT ("<input type=\"text\" name=\"purpose\">");
PRINT ("</TD>");
PRINT ("<TD>");
PRINT ("<input type=\"text\" name=\"room\">");
PRINT ("</TD>");
PRINT ("<TD>");
PRINT ("<input type=\"text\" name=\"timestart\">");
PRINT ("</TD>");
PRINT ("<TD>");
PRINT ("<input type=\"text\" name=\"timeend\">");
PRINT ("</TD>");
PRINT ("<TD align=\"right\">");
PRINT ("<input type=\"submit\" name=\"EditProfiles\"
value=\"add\">");
PRINT ("</TD>");
PRINT ("</tr>");
PRINT ("</form>");
# INFORMATION GATHERED HERE
FOR ($x=0; $x<$numids; $x++)
{
    $id=MYSQL_RESULT($result,$x,'id');
    $userid=MYSQL_RESULT($result,$x,'userid');
    $purpose=MYSQL_RESULT($result,$x,'purpose');
    $room=MYSQL_RESULT($result,$x,'room');

    $timestart=MYSQL_RESULT($result,$x,'timestart');
    $timeend=MYSQL_RESULT($result,$x,'timeend');

    #PRINTING OF INFORMATION
    PRINT ("<form method=\"POST\"
action=\"$_PHP_SELF\">");
    PRINT ("<TR><TD nowrap>");

```

```

value="\$userid\>");
PRINT ("Date Ordered");
PRINT ("</TD>");
PRINT (" User"); PRINT ("</TD>"); PRINT (" Purpose"); PRINT ("</TD>"); PRINT ("  | | |
```

```

PRINT ("Items");
PRINT ("</TD>");
PRINT ("<TD width=\"100\" nowrap>");
PRINT ("Date Needed");
PRINT ("</TD>");
PRINT ("<TD width=\"100\" nowrap>");
PRINT ("Date Return");
PRINT ("</TD>");
PRINT ("<TD align=\"right\" width=\"25\" nowrap>");
PRINT ("");
PRINT ("</TD>");
PRINT ("</tr>");

# INFORMATION GATHERED HERE
FOR ($x=0; $x<$numids; $x++)
{
    $id=MYSQL_RESULT($result,$x,'receipt_id');
    $count=MYSQL_RESULT($result,$x,'COUNT(*)');
    $user=MYSQL_RESULT($result,$x,'user_id');
    $purpose=MYSQL_RESULT($result,$x,'purpose');
    $date_e=MYSQL_RESULT($result,$x,'date_order');
    $date_r=MYSQL_RESULT($result,$x,'date_return');
    $date_n=MYSQL_RESULT($result,$x,'date_needed');
    $date_e=date("m/d/y
H:i",revertTimeStamp($date_e));
    $date_n=date("m/d/y
H:i",revertTimeStamp($date_n));
    $date_r=date("m/d/y
H:i",revertTimeStamp($date_r));

#PRINTING OF INFORMATION
PRINT ("<TR><TD nowrap>");
PRINT $date_e;
PRINT ("</TD>");
PRINT ("<TD>");
PRINT $user;
PRINT ("</TD>");
PRINT ("<TD>");
PRINT $purpose;
PRINT ("</TD>");
PRINT ("<TD>");
PRINT $count;
PRINT ("</TD>");
PRINT ("<TD>");
PRINT $date_n;
PRINT ("</TD>");
PRINT ("<TD>");
PRINT $date_r;
PRINT ("</TD>");
PRINT ("<TD align=\"right\">");
PRINT ("<font size=\"-1\">");
PRINT ("<A
HREF=\"$_PHP_SELF?area=r&mode=$mode&sstring=$id\">");
PRINT ("View");
PRINT ("</a>");
PRINT ("</FONT>");

```

```

        PRINT ("</TD>");
        PRINT ("</tr>");
    }
ELSE
{
####VARIABLES
$user=MYSQL_RESULT($result,0,'user_id');
$fullname=userResolve($user);
$purpose=MYSQL_RESULT($result,0,'purpose');
$date_e=MYSQL_RESULT($result,0,'date_order');
$date_r=MYSQL_RESULT($result,0,'date_return');
$date_n=MYSQL_RESULT($result,0,'date_needed');
$date_e=date("m/d/y H:i",revertTimeStamp($date_e));
$date_n=date("m/d/y H:i",revertTimeStamp($date_n));
$date_r=date("m/d/y H:i",revertTimeStamp($date_r));

PRINT ("<TR>");
PRINT ("<TD>");
PRINT ("USER: $fullname");
PRINT ("</TD></TR>");
PRINT ("<TR><TD>");
PRINT ("Ordered: $date_e");
PRINT ("</TD><TD>");
PRINT ("Date Needed: $date_n");
PRINT ("</TD></TR>");
PRINT ("<TR><TD>");
PRINT ("Purpose: $purpose");
PRINT ("</TD><TD>");
PRINT ("Date Return: $date_r");
PRINT ("</TD></TR>");

FOR ($x=0;$x<MYSQL_NUM_ROWS($result);$x++)
{
    $id=MYSQL_RESULT($result,$x,'lab_id');
    $number=getLabNumber($id);
    $name=getLabName2($number);
    $image=getLabImage($number);
    $delivery=MYSQL_RESULT($result,$x,'delivery');
    PRINT ("<TR><TD colspan=\"2\"
align=\"center\">");
    PRINT ("<BR>");
    PRINT ("<B>$number</B>");
    PRINT (" - ");
    PRINT $name;
    PRINT (" - ");
    PRINT ("Delivery: $delivery");
    PRINT ("<BR><BR>");
    IF ($image!="")
    {
        PRINT displayImage($image, "center");
    }
    ELSE
    {
        PRINT ("<BR>");
        PRINT ("No Image Available<BR><BR>");
    }
}
}

```

```

        PRINT ("</TD></TR>");
    }
}
}
ELSEIF ($area=='n')
{
###THE UPCOMING ORDERS LIST / WILL BE REPLACED WITH
CALENDAR
IF ($sstring=="")
{
PRINT ("<TR>");
PRINT ("<TD colspan=\"7\" align=\"center\"><B>");
PRINT MYSQL_NUM_ROWS($result);
PRINT (" Orders For Today and Tomorrow.");
PRINT ("</B><BR></TD></TR>");
PRINT ("<TR>");
PRINT ("<TD width=\"100\">");
PRINT ("<b>Date Ordered</b>");
PRINT ("</TD>");
PRINT ("<TD width=\"150\">");
PRINT ("<B>User</b>");
PRINT ("</TD>");
PRINT ("<TD width=\"150\">");
PRINT ("<B>Purpose</b>");
PRINT ("</TD>");
PRINT ("<TD width=\"100\">");
PRINT ("<B>Items</B>");
PRINT ("</TD>");
PRINT ("<TD width=\"100\" nowrap>");
PRINT ("<B>Date Needed</b>");
PRINT ("</TD>");
PRINT ("<TD width=\"100\" nowrap>");
PRINT ("<B>Date Return</b>");
PRINT ("</TD>");
PRINT ("<TD align=\"right\" width=\"25\" nowrap>");
PRINT ("");
PRINT ("</TD>");
PRINT ("</tr>");

# INFORMATION GATHERED HERE
FOR ($x=0; $x<$numids; $x++)
{
$id=MYSQL_RESULT($result,$x,'receipt_id');
$count=MYSQL_RESULT($result,$x,'COUNT(*)');
$user=MYSQL_RESULT($result,$x,'user_id');
$purpose=MYSQL_RESULT($result,$x,'purpose');
$date_e=MYSQL_RESULT($result,$x,'date_order');
$date_r=MYSQL_RESULT($result,$x,'date_return');
$date_n=MYSQL_RESULT($result,$x,'date_needed');
$date_e=date("m/d/y
H:i",revertTimeStamp($date_e));
$date_n=date("m/d/y
H:i",revertTimeStamp($date_n));
$date_r=date("m/d/y
H:i",revertTimeStamp($date_r));

```

```

#PRINTING OF INFORMATION
PRINT ("<TR><TD nowrap>");
PRINT $date_e;
PRINT ("</TD>");
PRINT ("<TD>");
PRINT $user;
PRINT ("</TD>");
PRINT ("<TD>");
PRINT $purpose;
PRINT ("</TD>");
PRINT ("<TD>");
PRINT $count;
PRINT ("</TD>");
PRINT ("<TD>");
PRINT $date_n;
PRINT ("</TD>");
PRINT ("<TD>");
PRINT $date_r;
PRINT ("</TD>");
PRINT ("<TD align=\"right\">");
PRINT ("<font size=\"-1\">");
PRINT ("<A
HREF=\" $PHP_SELF?area=r&mode=$mode&sstring=$id\">");
PRINT ("View");
PRINT ("</a>");
PRINT ("</FONT>");
PRINT ("</TD>");
PRINT ("</tr>");
}
}
ELSE
{
####VARIABLES
$user=MYSQL_RESULT($result,0,'user_id');
$fullname=userResolve($user);
$purpose=MYSQL_RESULT($result,0,'purpose');
$date_e=MYSQL_RESULT($result,0,'date_order');
$date_r=MYSQL_RESULT($result,0,'date_return');
$date_n=MYSQL_RESULT($result,0,'date_needed');
$date_e=date("m/d/y H:i",revertTimeStamp($date_e));
$date_n=date("m/d/y H:i",revertTimeStamp($date_n));
$date_r=date("m/d/y H:i",revertTimeStamp($date_r));

PRINT ("<TR>");
PRINT ("<TD>");
PRINT ("USER: $fullname");
PRINT ("</TD></TR>");
PRINT ("<TR><TD>");
PRINT ("Ordered: $date_e");
PRINT ("</TD><TD>");
PRINT ("Date Needed: $date_n");
PRINT ("</TD></TR>");
PRINT ("<TR><TD>");
PRINT ("Purpose: $purpose");
PRINT ("</TD><TD>");
PRINT ("Date Return: $date_r");
PRINT ("</TD></TR>");

```

```

FOR ($x=0;$x<MYSQL_NUM_ROWS($result);$x++)
{
    $id=MYSQL_RESULT($result,$x,'lab_id');
    $number=getLabNumber($id);
    $name=getLabName2($number);
    $image=getLabImage($number);
    $delivery=MYSQL_RESULT($result,$x,'delivery');
    PRINT ("<TR><TD colspan=\"2\"
align=\"center\">");
    PRINT ("<BR>");
    PRINT ("<B>$number</B>");
    PRINT (" - ");
    PRINT $name;
    PRINT (" - ");
    PRINT ("Delivery: $delivery");
    PRINT ("<BR><BR>");
    IF ($image!="")
    {
        PRINT displayImage($image, "center");
    }
    ELSE
    {
        PRINT ("<BR>");
        PRINT ("No Image Available<BR><BR>");
    }
    PRINT ("</TD></TR>");
}
}
ELSEIF ($numids=='1')
{
#GETTING THE INFORMATION
$id=MYSQL_RESULT($result,0,'lab_id');
$name=MYSQL_RESULT($result,0,'name');
$location=MYSQL_RESULT($result,0,'location');
$tier1=MYSQL_RESULT($result,0,'tier1');
$tier2=MYSQL_RESULT($result,0,'tier2');
$tier3=MYSQL_RESULT($result,0,'tier3');
$number=MYSQL_RESULT($result,0,'number');
$available=MYSQL_RESULT($result,0,'available');
$icon=MYSQL_RESULT($result,0,'icon');
$image=MYSQL_RESULT($result,0,'image');
$multimedia=MYSQL_RESULT($result,0,'multimedia');
$description=MYSQL_RESULT($result,0,'description');
$setup=MYSQL_RESULT($result,0,'setup');

#DISPLAY THE INFORMATION
%>

```

```

<table border="0" cellspacing="0" cellpadding="0" width="600"
align="center" bordercolor="#CCCCFF" bordercolorlight="#CCCCFF"
bordercolordark="#6666FF">
<tr>
<td height="28" valign="bottom"></td><TD>

```

```

        <%
        IF ($mode=="e")
        {
                PRINT ("<form method=\"POST\"
action=\"$PHP_SELF?mode=$mode&area=99&sstring=$sstring\">");
                PRINT ("<input type=\"text\" name=\"problem\"
size=\"40\">");
                PRINT ("<input type=\"hidden\" name=\"number\"
value=\"$number\">");
                PRINT ("<input type=\"submit\" name=\"Modify\"
value=\"Modify\">");
                PRINT ("</form>");

                PRINT ("<form method=\"POST\"
action=\"$PHP_SELF?mode=$mode&area=99&sstring=$sstring\">");
                PRINT ("<input type=\"text\" name=\"problem\"
size=\"40\">");
                PRINT ("<input type=\"hidden\" name=\"number\"
value=\"$number\">");
                PRINT ("<input type=\"submit\" name=\"Broken\"
value=\"Broken\">");
                PRINT ("</form>");

        }
        %>
</TD><TD></TD>
<%
IF ($mode=="e")
{
PRINT ("<td align=\"right\" valign=\"bottom\" height=\"37\" nowrap
width=\"183\">");
}
ELSE
{
PRINT ("<td background=\"tab2b.gif\" align=\"right\"
valign=\"bottom\" height=\"37\" nowrap width=\"183\">");
}
%>
<div align="right"><b>
<%

        IF ($mode=="e")
        {
                PRINT ("<form method=\"POST\"
action=\"$PHP_SELF?area=99&mode=$mode&sstring=$sstring\">");
                PRINT ("<input type=\"hidden\" name=\"id\" value=\"$id\">");

                PRINT ("<input type=\"text\" name=\"name\" size=\"40\"
value=\"$name\">");
        }
        ELSE
        {
                PRINT ("<$name");
        }
        %>
</b> </div>

```

```

</tr>
<tr bgcolor="#FEFDE4">
  <td valign="middle" height="31" colspan="3"> <%
    IF ($mode=="e")
    {
      IF ($tier1=="Astronomy & Astrophysics") {$op1=" SELECTED";}
      ELSEIF ($tier1=="Electricity & Magnetism") {$op2=" SELECTED";}
      ELSEIF ($tier1=="Fluid Mechanics") {$op3=" SELECTED";}
      ELSEIF ($tier1=="Mechanics") {$op4=" SELECTED";}
      ELSEIF ($tier1=="Modern Physics") {$op5=" SELECTED";}
      ELSEIF ($tier1=="Optics") {$op6=" SELECTED";}
      ELSEIF ($tier1=="Thermodynamics") {$op7=" SELECTED";}
      ELSEIF ($tier1=="Waves & Oscillations") {$op8=" SELECTED";}
      PRINT ("<select name=\"tier1\">");
      PRINT ("<OPTION value=\"Astronomy & Astrophysics\"$op1>Astronomy
& Astrophysics");
      PRINT ("<OPTION value=\"Electricity & Magnetism\"$op2>Electricity
& Magnetism");
      PRINT ("<OPTION value=\"Fluid Mechanics\"$op3>Fluid Mechanics");
      PRINT ("<OPTION value=\"Mechanics\"$op4>Mechanics");
      PRINT ("<OPTION value=\"Modern Physics\"$op5>Modern Physics");
      PRINT ("<OPTION value=\"Optics\"$op6>Optics");
      PRINT ("<OPTION value=\"Thermodynamics\"$op7>Thermodynamics");
      PRINT ("<OPTION value=\"Waves & Oscillations\"$op8>Waves &
Oscillations");

      PRINT ("</select>");
    }
    ELSE
    {
      PRINT ("&nbsp; $tier1");
    }

    %>, PIRA#<% PRINT $number; %></td>
  <td valign="middle" height="31" width="183">
    <div align="right"><B> </B></div>
  </td>
</tr>
<tr bgcolor="#FEFDE4">
  <td height="127" width="56" align="center" valign="top"> <br>
  </td>
  <td height="127" width="278" align="center" valign="top">
    <div align="left"> <br>
      <table border="1" cellspacing="0" cellpadding="0">
        <tr>
          <td valign="top" width="110" nowrap>Tier2:</td>
          <td nowrap><b> <%
            IF ($mode=="e")
            {
              PRINT ("<input type=\"text\" size=\"20\" name=\"tier2\"
value=\"${tier2}\">");
            }
            ELSE
            {
              PRINT $tier2;
            }
          </td>
        </tr>
      </table>
    </div>
  </td>
</tr>

```

```

        %> </b></td>
</tr>
<tr>
    <td width="110" nowrap>Tier3:</td>
    <td nowrap><b> <%
        IF ($mode=="e")
        {
            PRINT ("<input type=\"text\" size=\"20\" name=\"tier3\"
value=\"\${tier3}\">");
        }
        ELSE
        {
            PRINT $tier3;
        }
        %></b></td>
</tr>
<tr>
    <td width="110" nowrap>PIRA:</td>
    <td nowrap><b> <%
        IF ($mode=="e")
        {
            PRINT ("<input type=\"text\" size=\"10\" name=\"number\"
value=\"\${number}\">");
        }
        ELSE
        {
            PRINT $number;
        }
        %></b></td>
</tr>
<tr>
    <td width="110" nowrap>Available:</td>
    <td nowrap><b> <%
        IF ($mode=="e")
        {
            PRINT ("<input type=\"text\" size=\"5\" name=\"available\"
value=\"\${available}\">");
        }
        ELSE
        {
            PRINT $available;
        }
        %></b></td>
</tr>
<tr>
    <td width="110" nowrap>Location:</td>
    <td nowrap><b><%
        IF ($mode=="e")
        {
            PRINT ("<input type=\"text\" size=\"20\" name=\"location\"
value=\"\${location}\">");
        }
        ELSE
        {
            PRINT $location;
        }
        %></b></td>

```

```

    </tr>
</table>
<br>
<table border="1" cellspacing="0" cellpadding="0">
  <tr>
    <td valign="top" colspan="2" nowrap>Setup:</td>
  </tr>
  <tr>
    <td valign="top" colspan="2" nowrap><b><%
      IF ($mode=="e")
      {
        PRINT ("<textarea name=\"setup\" cols=\"30\"
rows=\"5\">$setup</textarea>");
      }
      ELSE
      {
        PRINT $setup;
      }
    %></b></td>
  </tr>
</table>
<br>
</div>
</td>
<td height="127" colspan="2" valign="top">
  <div align="left"><br>
    <table border="1" cellspacing="0" cellpadding="0">
      <tr>
        <td valign="top" width="85" nowrap>Icon:</td>
        <td nowrap><B>
          <%
            IF ($mode=="e")
            {
              PRINT ("<input type=\"text\" size=\"20\" name=\"icon\"
value=\"$icon\">");
            }
            ELSE
            {
              PRINT $icon;
            }
          %></B></td>
      </tr>
      <tr>
        <td width="85" nowrap>Image:</td>
        <td nowrap><B>
          <%
            IF ($mode=="e")
            {
              PRINT ("<input type=\"text\" size=\"20\" name=\"image\"
value=\"$image\">");
            }
            ELSE
            {
              PRINT $image;
            }
          %></b></td>
      </tr>
    </table>
  </div>
</td>

```



```

    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);
mysql_select_db(DATABASE, $mysql_link);

$hquery="SELECT MAX(lab_id) FROM demotable;";
$hi=MYSQL_QUERY($hquery, $mysql_link);
$hinum=MYSQL_RESULT($hi,0,'MAX(lab_id)');
$lquery="SELECT MIN(lab_id) FROM demotable;";
$lo=MYSQL_QUERY($lquery, $mysql_link);
$lonum=MYSQL_RESULT($lo,0,'MIN(lab_id)');

DO
{
    $prev--;
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);
mysql_select_db(DATABASE, $mysql_link);
$query="SELECT * FROM demotable WHERE (lab_id=$prev)";
$result=MYSQL_QUERY($query, $mysql_link);
$numrows=MYSQL_NUM_ROWS($result);
}
WHILE (($numrows<1) AND ($prev>$lonum));
IF ($prev>$lonum)
{
    PRINT ("<A
HREF=\ "$PHP_SELF?area=99&mode=$mode&sstring=$prev\">");
    %>  <%
}
ELSEIF ($prev<=$lonum)
{
    PRINT ("<A
HREF=\ "$PHP_SELF?area=99&mode=$mode&sstring=$hinum\">");
    %>  <%
}
DO
{
    $next++;
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);
mysql_select_db(DATABASE, $mysql_link);
$query="SELECT * FROM demotable WHERE (lab_id=$next)";
$result=MYSQL_QUERY($query, $mysql_link);
$numrows=MYSQL_NUM_ROWS($result);
}
WHILE (($numrows<1) AND ($next<=$hinum));
IF ($next<=$hinum)
{
    PRINT ("<A
HREF=\ "$PHP_SELF?area=99&mode=$mode&sstring=$next\">");
    %> 
<%
}
ELSEIF ($next>$hinum)
{
    PRINT ("<A
HREF=\ "$PHP_SELF?area=99&mode=$mode&sstring=$lonum\">");
    %> 
<%
}
}
%> </div>

```

```

        </td>
    </tr>
</table>
<%
    PRINT ("<div align=\"center\">");
    IF ($icon!="")
    {
        PRINT displayImage($icon,"default");
        print ("<br><BR>");
    }
    IF ($image!="")
    {
        PRINT displayImage($image,"default");
    }
    PRINT ("</div>");
%>
<%
    IF ($mode=="e")
    {
        PRINT ("</form>");
    }
}

#####
#####END SINGLE
DISPLAY#####

#####

### NEXT PART #####

    ELSEIF ($numids==0) {PRINT ("<BR><BR><B>Sorry, No Information
Available Currently</B>");}
    ELSE {
        # HEADERS
        PRINT ("<TR>");
        PRINT ("<TD colspan=\"5\" align=\"center\"><B>");
        PRINT MYSQL_NUM_ROWS($result);
        PRINT (" Demonstrations");
        PRINT ("</B><BR></TD></TR>");
        PRINT ("<TR>");
        PRINT ("<TD width=\"200\">");
        PRINT ("<b>Tier2</b>");
        PRINT ("</TD>");
        PRINT ("<TD width=\"200\">");
        PRINT ("<B>Tier3</b>");
        PRINT ("</TD>");
        PRINT ("<TD width=\"200\">");
        PRINT ("<B>Name</B>");
        PRINT ("</TD>");
        PRINT ("<TD width=\"50\" nowrap>");
        PRINT ("<B>PIRA</b>");
        PRINT ("</TD>");
        PRINT ("<TD align=\"right\" width=\"50\" nowrap>");

```

```

PRINT ("Available");
PRINT ("</TD>");
PRINT ("</tr>");

# INFORMATION GATHERED HERE
FOR ($x=0; $x<$numids; $x++)
{
$id=MYSQL_RESULT($result,$x,'lab_id');
$name=MYSQL_RESULT($result,$x,'name');
$tier2=MYSQL_RESULT($result,$x,'tier2');
$tier3=MYSQL_RESULT($result,$x,'tier3');
$number=MYSQL_RESULT($result,$x,'number');
$available=MYSQL_RESULT($result,$x,'available');

#PRINTING OF INFORMATION
PRINT ("|  |

```

Page – admin/index

```

<%
include("config.php");
include("search.php3");
include("display.php3");
include("adddemo.php3");
include("brokendemo.php3");
include("../getlabid.php3");
include("../getlabname2.php3");
include("../getlabnumber.php3");
include("../getlabimage.php3");
include("../reverttimestamp.php3");
include("../userresolve.php3");
include("../displayimage.php3");

%>
<html>
<head>
<title>Physics and Astronomy Demonstrations Database</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-
1">
<link rel="stylesheet" href="directory.css">
</head>

<body bgcolor="#FFFFFF">
<%
#UPDATES ANY INFORMATION RECEIVED FROM PREVIOUS PAGE

IF ($DelUsers)
{
$mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
mysql_select_db(DATABASE, $mysql_link);

IF ($DelUsers=="Del")
{
$query="DELETE FROM users WHERE userid='$userid'";
$result=MYSQL_QUERY($query, $mysql_link);
}
}
IF ($EditUsers)
{
$mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
mysql_select_db(DATABASE, $mysql_link);

IF ($EditUsers=="add")
{
$query="INSERT INTO users SET userid='$userid', passwd='$passwd',
fullname='$fullname', email='$email'";
$result=MYSQL_QUERY($query, $mysql_link);
}
ELSE
{
$query="UPDATE users SET userid='$userid', passwd='$passwd',
fullname='$fullname', email='$email' WHERE userid='$EditUsers'";
$result=MYSQL_QUERY($query, $mysql_link);
}
}
}

```

```

    }

}

IF ($DelProfiles)
{
$mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
mysql_select_db(DATABASE, $mysql_link);

IF ($DelProfiles=="Del")
{
$query="DELETE FROM profiles WHERE id=$id";
$result=MYSQL_QUERY($query, $mysql_link);
}
}

IF ($EditProfiles)
{
$mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
mysql_select_db(DATABASE, $mysql_link);

IF ($EditProfiles=="add")
{
$query="INSERT INTO profiles SET userid='$userid',
purpose='$purpose', room='$room', timestart='$timestart',
timeend='$timeend'";
$result=MYSQL_QUERY($query, $mysql_link);
}
ELSE
{
$query="UPDATE profiles SET userid='$userid', purpose='$purpose',
room='$room', timestart='$timestart', timeend='$timeend' WHERE
id=$EditProfiles";
$result=MYSQL_QUERY($query, $mysql_link);
}
}

}

IF ($Add)
{
$mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
mysql_select_db(DATABASE, $mysql_link);
$date=date("YmdHis");

$query="INSERT INTO demotable SET tier1='$tier1', tier2='$tier2',
tier3='$tier3', name='$name', number='$number', available='$available',
location='$location', icon='$icon', image='$image',
multimedia='$multimedia', description='$description', setup='$setup',
date_entered='$date'";
$result=MYSQL_QUERY($query, $mysql_link);
}
IF ($ToDoDone)
{
/*-----Connects to database */
$mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
mysql_select_db(DATABASE, $mysql_link);

$query="SELECT borm FROM todo WHERE id=$ToDoDone";
$result=MYSQL_QUERY($query, $mysql_link);
}

```

```

$borm=MYSQL_RESULT($result,0,'borm');
IF ($borm=="m")
{
    $toquery="DELETE FROM todo WHERE id=$ToDoDone";
    $toresult=MYSQL_QUERY($toquery, $mysql_link);
}
ELSEIF ($borm=="b")
{
    $toquery="SELECT number FROM todo WHERE id=$ToDoDone";
    $toresult=MYSQL_QUERY($toquery, $mysql_link);
    $number=MYSQL_RESULT($toresult,0,'number');

    $toquery3="UPDATE demotable SET available=(available+1) WHERE
number='$number'";
    $toresult3=MYSQL_QUERY($toquery3, $mysql_link);

    $toquery2="DELETE FROM todo WHERE id=$ToDoDone";
    $toresult2=MYSQL_QUERY($toquery2, $mysql_link);
}
}
IF ($Modify)
{
/*-----Connects to database */
$mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
mysql_select_db(DATABASE, $mysql_link);
$date=date("YmdHis");
$query="INSERT INTO todo SET number='$number', borm='m',
problem='$problem', date_entered='$date'";
$result=MYSQL_QUERY($query, $mysql_link);
}
IF ($Broken)
{
/*-----Connects to database */
$mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
mysql_select_db(DATABASE, $mysql_link);
$date=date("YmdHis");
$query="INSERT INTO todo SET number='$number', borm='b',
problem='$problem', date_entered='$date'";
$result=MYSQL_QUERY($query, $mysql_link);
brokendemo($number);
}
IF ($Update)
{
/*-----Connects to database */
$mysql_link=MYSQL_CONNECT(HOSTNAME,AUSERNAME,APASSWORD);
mysql_select_db(DATABASE, $mysql_link);

$date=date("YmdHis");

$query="UPDATE demotable SET tier1='$tier1', tier2='$tier2',
tier3='$tier3', name='$name', number='$number', available='$available',
location='$location', icon='$icon', image='$image',
multimedia='$multimedia', description='$description', setup='$setup',
date_entered='$date' WHERE lab_id=$id";
$result=MYSQL_QUERY($query, $mysql_link);
}
}

```

```

%>

<div align="center">
<B>Demonstration Database</B>
  <table width="750" border="0">
    <tr>
      <td colspan="3">
        <%
          PRINT ("<form method=\"get\" action=\"index.phtml\">");
        %>
        <div align="center">
          <input type="text" name="sstring" maxlength="30" size="30">
          <select name="area">
            <option value="10">Keyword</option>
            <option value="12">Name</option>
            <option value="13">Location</option>
            <option value="11">Number</option>
            <option value="14">Available</option>

          </select>
          <%
            PRINT ("<input type=\"hidden\" name=\"mode\" "
value=\"\$mode\">");
          %>
          <input type="submit" name="Submit" value="Find">
          </form>
        </div>
      </td>
    </tr>

    <%
      # Start PHP listings

      # Get and Prepare Settings
      $pageinfo=getenv("QUERY_STRING");
      parse_str($pageinfo);
      IF ($area=="") { $area="p"; }
      IF ($mode=="") { $mode="v"; }
    %>

    <tr>
      <td colspan="3">
        <div align="center">
          <%
            IF ($mode=="e")
            {
              PRINT ("<A
href=\"\$PHP_SELF?area=$area&mode=v&sstring=$sstring\">");
              PRINT ("View Only");
              PRINT ("</a>");
            }
            ELSE
            {
              PRINT ("<A
href=\"\$PHP_SELF?area=$area&mode=e&sstring=$sstring\">");

```

```

PRINT ("Edit");
PRINT ("</a>");
}
PRINT (" - ");
PRINT ("<A href=\" $PHP_SELF?area=999&mode=$mode\">");
PRINT ("Add Demonstration");
PRINT ("</a>");
PRINT (" - ");
PRINT ("<A href=\" $PHP_SELF?area=u&mode=$mode\">");
PRINT ("Functions");
PRINT ("</a>");
PRINT (" - ");
PRINT ("<A href=\" $PHP_SELF?area=n&mode=$mode\">");
PRINT ("Upcoming Orders");
PRINT ("</a>");
PRINT (" - ");
PRINT ("<A href=\" $PHP_SELF?area=s&mode=$mode\">");
PRINT ("Users");
PRINT ("</a>");
PRINT (" - ");
PRINT ("<A href=\" $PHP_SELF?area=l&mode=$mode\">");
PRINT ("Profiles");
PRINT ("</a>");
PRINT (" - ");
PRINT ("<A href=\" $PHP_SELF?area=d&mode=$mode\">");
PRINT ("ToDo (Broken/Mod)");
PRINT ("</a>");
PRINT (" - ");
PRINT ("<A href=\" $PHP_SELF?area=r&mode=$mode\">");
PRINT ("Orders");
PRINT ("</a>");
PRINT ("<BR>");
PRINT ("<A href=\" $PHP_SELF?area=z&mode=$mode\">");
PRINT ("All");
PRINT ("</a>");
PRINT (" - ");
PRINT ("<A href=\" $PHP_SELF?area=a&mode=$mode\">");
PRINT ("Astronomy");
PRINT ("</a>");
PRINT (" - ");
PRINT ("<A href=\" $PHP_SELF?area=e&mode=$mode\">");
PRINT ("Electricity");
PRINT ("</a>");
PRINT (" - ");
PRINT ("<A href=\" $PHP_SELF?area=f&mode=$mode\">");
PRINT ("Fluid M.");
PRINT ("</a>");
PRINT (" - ");
PRINT ("<A href=\" $PHP_SELF?area=c&mode=$mode\">");
PRINT ("Mechanics");
PRINT ("</a>");
PRINT (" - ");
PRINT ("<A href=\" $PHP_SELF?area=m&mode=$mode\">");
PRINT ("Modern");
PRINT ("</a>");
PRINT (" - ");
PRINT ("<A href=\" $PHP_SELF?area=o&mode=$mode\">");

```

```

        PRINT ("Optics");
        PRINT ("</a>");
        PRINT (" - ");
        PRINT ("<A href=\"\$PHP_SELF?area=t&mode=\$mode\">");
        PRINT ("Thermodynamics");
        PRINT ("</a>");
        PRINT (" - ");
        PRINT ("<A href=\"\$PHP_SELF?area=w&mode=\$mode\">");
        PRINT ("Waves");
        PRINT ("</a>");

        %>
    </div>
</td>
</tr>
<tr>
<td width="800" valign="top" colspan="3">
<br>
<%
# Start PHP listings

# Get and Prepare Settings
$area="";
$pageinfo=getenv("QUERY_STRING");
parse_str($pageinfo);
IF ($area=="") { $area="a";}
IF ($mode=="") { $mode="v";}
%>
# SEARCH

$demos=directsearch($area, $mode, $sstring);
%>

<table border=0 cellpadding=1 cellspacing=1 align="center">

    <%
    IF ($area=='999')
    {
        #ADD MACHINE
        adddemo ($demos, $area, $mode);
    }
    ELSE
    {
        #DISPLAY
        directdisplay($demos, $mode, $area, $sstring);
    }

    %>
</table>
</td>
</tr>
</table>
</div>
</body>
</html>

```

Function – admin/search

```

<%
function directsearch($area, $mode, $sstring)
{
    #Pull a list from the directories table
    /*-----Connects to database */
    $mysql_link=MYSQL_CONNECT(HOSTNAME,USERNAME,PASSWORD);
    mysql_select_db(DATABASE, $mysql_link);

    # Determine Search Query
    IF ($area=='999')
        {
            $squery="SELECT * FROM demotable";
        }
    ELSEIF ($area=='u')
        {
            IF ($sstring=="")
                {
                    $squery="SELECT category, COUNT(*) FROM functions
GROUP BY category";
                }
            ELSEIF (($sstring>0) AND ($sstring<1000))
                {
                    $squery="SELECT name, function FROM functions WHERE
id=$sstring";
                }
            ELSE
                {
                    $squery="SELECT id, name, category FROM functions
WHERE category='$sstring'";
                }
        }
    ELSEIF ($area=='r')
        {
            IF ($sstring=="")
                {
                    $squery="SELECT receipt_id, user_id, date_order,
date_needed, date_return, COUNT(*), purpose FROM transactions GROUP BY
receipt_id";
                }
            ELSEIF (($sstring>0) AND ($sstring<1000000))
                {
                    $squery="SELECT * FROM transactions WHERE
receipt_id=$sstring";
                }
        }
    ELSEIF ($area=='n')
        {
            ###DATEformat = YYYYMMDD+HHMMSS
            $today=date("Ymd");
            $today.="000000";
            $tomor=date("Ymd",time()+86400);
            $tomor.="235959";

            IF ($sstring=="")

```

```

        {
            $squery="SELECT receipt_id, user_id, date_needed,
date_order, date_return, COUNT(*), purpose FROM transactions WHERE
((date_needed>=$today)AND(date_needed<=$tomor)) GROUP BY receipt_id";
        }
        ELSEIF (($sstring>0) AND ($sstring<1000000))
        {
            $squery="SELECT * FROM transactions WHERE
receipt_id=$sstring";
        }
    }
    ELSEIF ($area=='l')
    {
        $squery="SELECT * FROM profiles ORDER BY id";
    }
    ELSEIF ($area=='s')
    {
        $squery="SELECT * FROM users ORDER BY userid";
    }
    ELSEIF ($area=='d')
    {
        $squery="SELECT * FROM todo ORDER BY date_entered";
    }
    ELSEIF ($area=='99')
    {
        $squery="SELECT * FROM demotable WHERE (lab_id=$sstring)";
    }

    ELSE
    {
        $squery="SELECT * FROM demotable WHERE ((lab_id!=0)";

        IF ($sstring!="")
        {
            IF ($area=="10")
            {
                $squery.=" AND ((name LIKE '%$sstring%') OR
(tier1 LIKE '%$sstring%' ) OR (tier2 LIKE '%$sstring%' ) OR (tier3 LIKE
'%$sstring%'))";
            }
            ELSEIF ($area=="11")
            {
                $squery.=" AND (number LIKE '%$sstring%')";
            }
            ELSEIF ($area=="12")
            {
                $squery.=" AND (name LIKE '%$sstring%')";
            }

            ELSEIF ($area=="13")
            {
                $squery.=" AND (location LIKE '%$sstring%')";
            }
            ELSEIF ($area=="14")
            {
                $squery.=" AND (available='$sstring')";
            }
        }
    }

```

```

    }
    ELSEIF ($area=="z")
    {
        $squery.="";
    }
    ELSEIF ($area=="a")
    {
        $squery.=" AND (tier1='Astronomy & Astrophysics')";
    }
    ELSEIF ($area=="e")
    {
        $squery.=" AND (tier1='Electricity & Magnetism')";
    }
    ELSEIF ($area=="m")
    {
        $squery.=" AND (tier1='Modern Physics')";
    }
    ELSEIF ($area=="c")
    {
        $squery.=" AND (tier1='Mechanics')";
    }
    ELSEIF ($area=="w")
    {
        $squery.=" AND (tier1='Waves & Oscillations')";
    }
    ELSEIF ($area=="f")
    {
        $squery.=" AND (tier1='Fluid Mechanics')";
    }
    ELSEIF ($area=="o")
    {
        $squery.=" AND (tier1='Optics')";
    }
    ELSEIF ($area=="t")
    {
        $squery.=" AND (tier1='Thermodynamics')";
    }
    $squery.=") ORDER BY number";
}

```

```
$result=MYSQL_QUERY($squery, $mysql_link);
```

```
RETURN ($result);
```

```
}
```

```
%>
```

CSS – admin/directory

```

TD, TH {font-family: Times New Roman, Times, serif, Courier; font-size:
11pt; }

/* PARAGRAPH FORMATTING */
.menu LI {text-align: left ! important; }
P, DD, {line-height: 140%;}

/* Dan Green carolina blue=6AB3FD */
.datetime {color: #000000; font-family: Times New Roman}
.caption {font-size: 9; font-family: Helvetica}
.headnospc {color: #6e91e1; font-weight: bold}
.heading {margin-top: 1em; margin-bottom: 1em; color: #6e91e1; font-
weight: bold}
.tutorial {font-size: -1} A:link, A:visited, A:active, A:hover {color:
#6e91e1; text-decoration: none}
.prompt {font-size: 10px; color:purple; font-family: Courier}
/*A:hover {color: #6e91e1; text-decoration: none; }*/

P.no {text-indent: 0in; margin-top: 1em; margin-bottom: 1em; }
/* P + P {margin: 0px; } */

/* LINK COLORS AND STYLES */
.link A:link, A:visited, A:active {color: #6e91e1; text-decoration:
none;}, A:hover {color: #6e91e1; text-decoration: underline}

DT {font-size: 12pt; margin-top: 10px; }
/* LI {margin-left: -8px; } */

/* HORIZONTAL RULES */
HR {height: 1px; color: #FF8000; }

/* HEADERS */
H2, H3, {font-weight: bold; }
H2 {font-size: 18pt; }
H3 {font-size: 13.5pt; }

/* ???? H4 {font-size: 12pt; } */
/* MAIN FONT DECLARATIONS */
BODY { font-family: "Times New Roman", Times, serif; font-size: 11pt;
}

```

APPENDIX D: DATA

Table: demotable

```

# phpMyAdmin MySQL-Dump
# http://phpwizard.net/phpMyAdmin/
#
# Host: mysql.physics.unc.edu Database : labdemos

# -----
#
# Table structure for table 'demotable'
#

CREATE TABLE demotable (
  lab_id int(11) DEFAULT '0' NOT NULL auto_increment,
  tier1 varchar(25) NOT NULL,
  tier2 varchar(40) NOT NULL,
  tier3 varchar(40) NOT NULL,
  name varchar(50) NOT NULL,
  number varchar(10) NOT NULL,
  available smallint(6),
  location varchar(20),
  icon varchar(50),
  image varchar(50),
  multimedia varchar(50),
  description text,
  setup text,
  date_entered timestamp(14),
  PRIMARY KEY (lab_id),
  KEY lab_id (lab_id),
  UNIQUE lab_id_2 (lab_id)
);

#
# Dumping data for table 'demotable'
#

INSERT INTO demotable VALUES( '1', 'Astronomy & Astrophysics', 'Planetary
Astronomy', 'Solar System Mechanics', 'Orrery', '8A10.10', '1', "", "", '8A10_10.GIF', "", "",
'20000709150519');
INSERT INTO demotable VALUES( '2', 'Astronomy & Astrophysics', 'Planetary
Astronomy', 'Solar System Mechanics', 'Horizon Astronomy Model', '8A10.50', '1', "", "",
'8A10_50.GIF', "", "", '20000709124228');

```

```

INSERT INTO demotable VALUES( '3', 'Astronomy & Astrophysics', 'Planetary
Astronomy', 'Solar System Mechanics', 'Celestial Sphere', '8A10.80', '1', "", "",
'8A10_80.GIF', "", "", "", '20000709124228');
INSERT INTO demotable VALUES( '4', 'Astronomy & Astrophysics', 'Stellar
Astronomy', 'Miscellaneous', 'Forward And Backward Scattering', '8B10.40', '1', "", "",
'8B10_40.GIF', "", "", "", '20000709124228');
INSERT INTO demotable VALUES( '5', 'Astronomy & Astrophysics', 'Stellar
Astronomy', 'Miscellaneous', 'Pulsar Model', '8B10.65', '1', "", "", '8B10_65.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '6', 'Astronomy & Astrophysics', 'Cosmology',
'Models Of The Universe', 'Inflating Balloon', '8C10.15', '1', "", "", '8C10_15.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '7', 'Astronomy & Astrophysics', 'Cosmology',
'Models Of The Universe', 'Bubble Universe', '8C10.20', '1', "", "", '8C10_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '8', 'Astronomy & Astrophysics', 'Cosmology',
'Models Of The Universe', 'Moebius Strip', '8C10.45', '1', "", "", '8C10_45.GIF', "", "",
'20000709195637');
INSERT INTO demotable VALUES( '9', 'Modern Physics', 'Quantum Effects',
'Photoelectric Effect', 'Discharging Zinc Plate', '7A10.10', '0', "", "", '7A10_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '10', 'Modern Physics', 'Quantum Effects',
'Photoelectric Effect', 'Photoelectric Charging', '7A10.12', '0', "", "", '7A10_12.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '11', 'Modern Physics', 'Quantum Effects',
'Photoelectric Effect', 'Stopping Potential', '7A10.30', '0', "", "", '7A10_30.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '12', 'Modern Physics', 'Quantum Effects',
'Compton Effects', 'Compton Effect', '7A20.10', '0', "", "", '7A20_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '13', 'Modern Physics', 'Quantum Effects', 'Wave
Mechanics', 'Vibrating Circular Wire', '7A50.40', '0', "", "", '7A50_40.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '14', 'Modern Physics', 'Quantum Effects', 'X-Ray
And Electron Diffraction', 'Electron Diffraction', '7A60.10', '1', "", "", '7A60_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '15', 'Modern Physics', 'Quantum Effects', 'X-Ray
And Electron Diffraction', 'Miller Indices', '7A60.15', '0', "", "", '7A60_15.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '16', 'Modern Physics', 'Quantum Effects', 'X-Ray
And Electron Diffraction', 'Microwave Bragg Diffraction', '7A60.50', '1', "", "",
'7A60_50.GIF', "", "", "", '20000709124228');
INSERT INTO demotable VALUES( '17', 'Modern Physics', 'Atomic Physics', 'Spectra',
'Student Gratings And Line Sources', '7B10.10', '0', "", "", '7B10_10.GIF', "", "",
'20000709124228');

```

```

INSERT INTO demotable VALUES( '18', 'Modern Physics', 'Atomic Physics',
'Absorption', 'Sodium Absorption/ Emission', '7B11.10', '0', "", "", '7B11_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '19', 'Modern Physics', 'Atomic Physics',
'Resonance Radiation', 'Iodine Resonance Radiation', '7B13.10', '0', "", "", '7B13_10.GIF', "",
"", "", '20000709124228');
INSERT INTO demotable VALUES( '20', 'Modern Physics', 'Atomic Physics', 'Atomic
Models', 'Electron Orbital Models', '7B50.10', '0', "", "", '7B50_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '21', 'Modern Physics', 'Nuclear Physics',
'Radioactivity', 'Secular Equilibrium', '7D10.40', '0', "", "", '7D10_40.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '22', 'Modern Physics', 'Nuclear Physics',
'Radioactivity', 'Dice On The Overhead', '7D10.50', '0', "", "", '7D10_50.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '23', 'Modern Physics', 'Nuclear Physics',
'Radioactivity', 'Range And Absorption', '7D10.60', '1', "", "", '7D10_60.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '24', 'Modern Physics', 'Nuclear Physics', 'Nuclear
Reactions', 'Mousetraps', '7D20.10', '0', "", "", '7D20_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '25', 'Modern Physics', 'Nuclear Physics', 'Nuclear
Reactions', 'Match Chain reactions', '7D20.15', '0', "", "", '7D20_15.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '26', 'Modern Physics', 'Nuclear Physics', 'Nuclear
Reactions', 'Dominoes Chain Reaction', '7D20.20', '0', "", "", '7D20_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '27', 'Modern Physics', 'Nuclear Physics', 'Particle
Detectors', 'Ludlum Detectors', '7D30.05', '1', "", "", '7D30_05.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '28', 'Modern Physics', 'Nuclear Physics', 'Particle
Detectors', 'Nixie Geiger Counter', '7D30.10', '0', "", "", '7D30_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '29', 'Modern Physics', 'Nuclear Physics', 'Particle
Detectors', 'Alpha Detector', '7D30.20', '1', "", "", '7D30_20.GIF', "", "", '20000709152540');
INSERT INTO demotable VALUES( '30', 'Modern Physics', 'Nuclear Physics', 'Particle
Detectors', 'Diffusion Cloud Chamber', '7D30.60', '0', "", "", '7D30_60.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '31', 'Modern Physics', 'Nuclear Physics', 'Models
Of The Nucleus', 'Rutherford Scattering', '7D50.10', '0', "", "", '7D50_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '32', 'Modern Physics', 'Nuclear Physics', 'Models
Of The Nucleus', 'Mass Defect', '7D50.46', '0', "", "", '7D50_46.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '33', 'Modern Physics', 'Nuclear Physics', 'Special
Relativity', 'Lorentz Transformation', '7F10.60', '1', "", "", '7F10_60.GIF', "", "",
'20000709124228');

```

INSERT INTO demotable VALUES('34', 'Fluid Mechanics', 'Surface Tension', 'Force Of Surface Tension', 'Rubber Balloons', '2A10.51', '1', "", "", '2A10_51.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('35', 'Fluid Mechanics', 'Surface Tension', 'Force Of Surface Tension', 'Surface Tension Bottle', '2A10.60', '1', "", "", '2A10_60.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('36', 'Fluid Mechanics', 'Statics Of Fluids', 'Atmospheric Pressure', 'Crush The Soda Can', '2B30.15', '1', "", "", '2B30_15.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('37', 'Fluid Mechanics', 'Statics Of Fluids', 'Atmospheric Pressure', 'Crush The Can With Vacuum Pump', '2B30.25', '1', "", "", '2B30_25.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('38', 'Fluid Mechanics', 'Statics Of Fluids', 'Atmospheric Pressure', 'Magdeburg Hemispheres', '2B30.30', '1', "", "", '2B30_30.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('39', 'Fluid Mechanics', 'Statics Of Fluids', 'Atmospheric Pressure', 'Stick And Newspaper', '2B30.60', '1', "", "", '2B30_60.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('40', 'Fluid Mechanics', 'Statics Of Fluids', 'Measuring Pressure', 'Mercury Barometer', '2B35.10', '1', "", "", '2B35_10.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('41', 'Fluid Mechanics', 'Statics Of Fluids', 'Density And Buoyancy', 'Weigh Submerged Block', '2B40.10', '1', "", "", '2B40_10.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('42', 'Fluid Mechanics', 'Statics Of Fluids', 'Density And Buoyancy', 'Archimedes Principle', '2B40.20', '1', "", "", '2B40_20.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('43', 'Fluid Mechanics', 'Statics Of Fluids', 'Density And Buoyancy', 'Cartesian Diver', '2B40.30', '1', "", "", '2B40_30.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('44', 'Fluid Mechanics', 'Dynamics Of Fluids', 'Bernoulli Force', 'Bernoulli Tubes', '2C20.10', '1', "", "", '2C20_10.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('45', 'Fluid Mechanics', 'Dynamics Of Fluids', 'Bernoulli Force', 'Floating Ball', '2C20.30', '1', "", "", '2C20_30.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('46', 'Fluid Mechanics', 'Dynamics Of Fluids', 'Bernoulli Force', 'Ball And Funnel', '2C20.35', '1', "", "", '2C20_35.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('47', 'Fluid Mechanics', 'Dynamics Of Fluids', 'Bernoulli Force', 'Curve Ball', '2C20.60', '1', "", "", '2C20_60.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('48', 'Fluid Mechanics', 'Dynamics Of Fluids', 'Bernoulli Force', 'Bernoulli Pen Barrel', '2C20.75', '1', "", "", '2C20_75.GIF', "", "", '20000709124228');

```

INSERT INTO demotable VALUES( '49', 'Fluid Mechanics', 'Dynamics Of Fluids',
'Viscosity', 'Terminal Velocity - Styrofoam', '2C30.60', '1', "", "", '2C30_60.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '50', 'Fluid Mechanics', 'Dynamics Of Fluids',
'Viscosity', 'Terminal Velocity Coffee Filters', '2C30.65', '1', "", "", '2C30_65.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '51', 'Fluid Mechanics', 'Dynamics Of Fluids',
'Vortices', 'Tornado Tube', '2C50.30', '1', "", "", '2C50_30.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '52', 'Fluid Mechanics', 'Dynamics Of Fluids', 'Non-
Newtonian Fluids', 'Corn Starch', '2C60.30', '1', "", "", '2C60_30.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '53', 'Electricity & Magnetism', 'Electrostatics',
'Producing Static Charge', 'Rods And Fur', '5A10.10', '1', "", "", '5A10_10.GIF', "", "",
'20000709150532');
INSERT INTO demotable VALUES( '54', 'Electricity & Magnetism', 'Electrostatics',
'Producing Static Charge', 'Electrophorus', '5A10.20', '1', "", "", '5A10_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '55', 'Electricity & Magnetism', 'Electrostatics',
'Coulomb\'s Law', 'Rods And Pivot', '5A20.10', '1', "", "", '5A20_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '56', 'Electricity & Magnetism', 'Electrostatics',
'Coulomb\'s Law', 'Coulombs Law With Pith Balls', '5A20.20', '1', "", "", '5A20_20.GIF', "",
"", '20000709124228');
INSERT INTO demotable VALUES( '57', 'Electricity & Magnetism', 'Electrostatics',
'Induced Charge', 'Electroscope Charging By Induction', '5A40.15', '1', "", "",
'5A40_15.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '58', 'Electricity & Magnetism', 'Electrostatics',
'Induced Charge', 'Charge Propelled Cylinder', '5A40.20', '1', "", "", '5A40_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '59', 'Electricity & Magnetism', 'Electrostatics',
'Induced Charge', 'Metal Rod Attraction', '5A40.35', '1', "", "", '5A40_35.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '60', 'Electricity & Magnetism', 'Electrostatics',
'Induced Charge', 'Deflection Of Water Stream', '5A40.40', '1', "", "", '5A40_40.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '61', 'Electricity & Magnetism', 'Electric Fields And
Potential', 'Electric Field', 'Hair On End', '5B10.10', '1', "", "", '5B10_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '62', 'Electricity & Magnetism', 'Electric Fields And
Potential', 'Electric Field', 'Van De Graaff Streamers', '5B10.15', '1', "", "", '5B10_15.GIF', "",
"", '20000709124228');
INSERT INTO demotable VALUES( '63', 'Electricity & Magnetism', 'Electric Fields And
Potential', 'Electric Field', 'Styrofoam Peanuts', '5B10.25', '1', "", "", '5B10_25.GIF', "", "",
'20000709124228');

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INSERT INTO demotable VALUES( '64', 'Electricity & Magnetism', 'Electric Fields And
Potential', 'Electric Field', 'Electrified Strings', '5B10.26', '1', "", "", '5B10_26.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '65', 'Electricity & Magnetism', 'Electric Fields And
Potential', 'Electric Field', 'Electrostatic Ping Pong', '5B10.35', '1', "", "", '5B10_35.GIF', "", "",
'', '20000709124228');
INSERT INTO demotable VALUES( '66', 'Electricity & Magnetism', 'Electric Fields And
Potential', 'Guass\ Law', 'Faradays Ice Pail On Electroscope', '5B20.15', '1', "", "",
'5B20_15.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '67', 'Electricity & Magnetism', 'Electric Fields And
Potential', 'Guass\Law', 'Electroscope In A Cage', '5B20.30', '1', "", "", '5B20_30.GIF', "", "",
'', '20000709124228');
INSERT INTO demotable VALUES( '68', 'Electricity & Magnetism', 'Electric Fields And
Potential', 'Guass\Law', 'Electroscope In A Cage/Wimhurst', '5B20.31', '1', "", "",
'5B20_31.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '69', 'Electricity & Magnetism', 'Electric Fields And
Potential', 'Guass\ Law', 'Radio In A Cage', '5B20.35', '1', "", "", '5B20_35.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '70', 'Electricity & Magnetism', 'Electric Fields And
Potential', 'Electrostatic Potential', 'Lightning Rod', '5B30.30', '1', "", "", '5B30_30.GIF', "", "",
'', '20000709124228');
INSERT INTO demotable VALUES( '71', 'Electricity & Magnetism', 'Electric Fields And
Potential', 'Electrostatic Potential', 'Point And Ball With Van De Graaff', '5B30.35', '1', "",
'', '5B30_35.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '72', 'Electricity & Magnetism', 'Electric Fields And
Potential', 'Electrostatic Potential', 'Pinwheel', '5B30.50', '1', "", "", '5B30_50.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '73', 'Electricity & Magnetism', 'Electric Fields And
Potential', 'Electrostatic Potential', 'Cottrell Precipitator', '5B30.60', '1', "", "",
'5B30_60.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '74', 'Electricity & Magnetism', 'Capacitance',
'Capacitors', 'Sample Capacitors', '5C10.10', '1', "", "", '5C10_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '75', 'Electricity & Magnetism', 'Capacitance',
'Capacitors', 'Parallel Plate Capacitor', '5C10.20', '1', "", "", '5C10_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '76', 'Electricity & Magnetism', 'Capacitance',
'Dielectrics', 'Capacitor With Dielectrics', '5C20.10', '1', "", "", '5C20_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '77', 'Electricity & Magnetism', 'Capacitance',
'Dielectrics', 'Helium Dielectric', '5C20.17', '1', "", "", '5C20_17.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '78', 'Electricity & Magnetism', 'Capacitance',
'Dielectrics', 'Dissectible Condenser', '5C20.30', '1', "", "", '5C20_30.GIF', "", "",
'20000709124228');

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INSERT INTO demotable VALUES( '79', 'Electricity & Magnetism', 'Capacitance',
'Energy Stored In A Capacitor', 'Short A Capacitor', '5C30.20', '1', "", "", '5C30_20.GIF', "",
"", '20000709124228');
INSERT INTO demotable VALUES( '80', 'Electricity & Magnetism', 'Capacitance',
'Energy Stored In A Capacitor', 'Light The Bulb', '5C30.30', '1', "", "", '5C30_30.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '81', 'Electricity & Magnetism', 'Resistance',
'Resistance Characteristics', 'Resistance Model', '5D10.40', '1', "", "", '5D10_40.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '82', 'Electricity & Magnetism', 'Resistance',
'Resistivity And Temperature', 'Flame And Liquid Nitrogen', '5D20.15', '1', "", "",
'5D20_15.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '83', 'Electricity & Magnetism', 'Resistance',
'Conduction In Gases', 'Jacobs Ladder', '5D40.10', '1', "", "", '5D40_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '84', 'Electricity & Magnetism', 'Emf And Current',
'Cells And Batteries', 'Lemon Battery', '5E40.25', '1', "", "", '5E40_25.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '85', 'Electricity & Magnetism', 'Emf And Current',
'Piezoelectricity', 'Piezoelectric Gun', '5E60.25', '1', "", "", '5E60_25.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '86', 'Electricity & Magnetism', 'De Circuits',
'Ohm\'s Law', 'Ohm\'s Law', '5F10.10', '1', "", "", '5F10_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '87', 'Electricity & Magnetism', 'De Circuits',
'Power And Energy', 'Hot Dog Cooker', '5F15.20', '1', "", "", '5F15_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '88', 'Electricity & Magnetism', 'De Circuits',
'Circuit Analysis', 'Kirchoff\'s Voltage Law', '5F20.10', '1', "", "", '5F20_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '89', 'Electricity & Magnetism', 'De Circuits',
'Circuit Analysis', 'Continuity Of Current', '5F20.15', '1', "", "", '5F20_15.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '90', 'Electricity & Magnetism', 'De Circuits',
'Circuit Analysis', 'Superposition Of Current', '5F20.20', '1', "", "", '5F20_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '91', 'Electricity & Magnetism', 'De Circuits',
'Circuit Analysis', 'Potentiometer', '5F20.30', '1', "", "", '5F20_30.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '92', 'Electricity & Magnetism', 'De Circuits',
'Circuit Analysis', 'Series And Parallel Light Bulbs', '5F20.50', '1', "", "", '5F20_50.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '93', 'Electricity & Magnetism', 'De Circuits',
'Circuit Analysis', 'Light Bulb Board - 12V', '5F20.51', '1', "", "", '5F20_51.GIF', "", "",
'20000709124228');

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INSERT INTO demotable VALUES( '94', 'Electricity & Magnetism', 'De Circuits', 'RC
Circuits', 'RC Time Constant On Scope', '5F30.20', '1', "", "", '5F30_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '95', 'Electricity & Magnetism', 'Magnetic
Materials', 'Magnets', 'Lodestone', '5G10.15', '1', "", "", '5G10_15.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '96', 'Electricity & Magnetism', 'Magnetic
Materials', 'Magnetic Domains And Magnetization', 'Compass Arrays', '5G20.30', '1', "", "",
'5G20_30.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '97', 'Electricity & Magnetism', 'Magnetic
Materials', 'Magnetic Domains And Magnetization', 'Pound Iron Bar', '5G20.50', '1', "", "",
'5G20_50.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '98', 'Electricity & Magnetism', 'Magnetic
Materials', 'Magnetic Domains And Magnetization', 'Electromagnet', '5G20.71', '1', "", "",
'5G20_71.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '99', 'Electricity & Magnetism', 'Magnetic
Materials', 'Temperature And Magnetism', 'Meissner Effect', '5G50.50', '1', "", "",
'5G50_50.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '100', 'Electricity & Magnetism', 'Magnetic Fields
And Forces', 'Magnetic Fields', 'Oersted\'s Effect', '5H10.20', '1', "", "", '5H10_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '101', 'Electricity & Magnetism', 'Magnetic Fields
And Forces', 'Magnetic Fields', 'Magnet And Iron Filings', '5H10.30', '1', "", "",
'5H10_30.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '102', 'Electricity & Magnetism', 'Magnetic Fields
And Forces', 'Fields And Currents', 'Solenoid And Iron Filings', '5H15.40', '1', "", "",
'5H15_40.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '103', 'Electricity & Magnetism', 'Magnetic Fields
And Forces', 'Forces On Magnets', 'Magnets And Pivot', '5H20.10', '1', "", "",
'5H20_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '104', 'Electricity & Magnetism', 'Magnetic Fields
And Forces', 'Forces On Magnets', 'Snap The Lines Of Force', '5H20.15', '1', "", "",
'5H20_15.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '105', 'Electricity & Magnetism', 'Magnetic Fields
And Forces', 'Forces On Magnets', 'Levitation Magnets', '5H20.20', '1', "", "",
'5H20_20.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '106', 'Electricity & Magnetism', 'Magnetic Fields
And Forces', 'Magnet/Electromagnet Interactions', 'Magnet In A Coil', '5H25.10', '1', "", "",
'5H25_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '107', 'Electricity & Magnetism', 'Magnetic Fields
And Forces', 'Force On Moving Charges', 'Cathode Ray Tube', '5H30.10', '1', "", "",
'5H30_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '108', 'Electricity & Magnetism', 'Magnetic Fields
And Forces', 'Force On Moving Charges', 'Bending An Electron Beam', '5H30.15', '1', "", "",
'5H30_15.GIF', "", "", '20000709124228');

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INSERT INTO demotable VALUES('109', 'Electricity & Magnetism', 'Magnetic Fields And Forces', 'Force On Moving Charges', 'E/M Tube', '5H30.20', '1', "", "", '5H30_20.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('110', 'Electricity & Magnetism', 'Magnetic Fields And Forces', 'Torques On Coils', 'Model Galvanometer', '5H50.10', '1', "", "", '5H50_10.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('111', 'Electricity & Magnetism', 'Inductance', 'LR Circuits', 'LR Time Constant On Scope', '5J20.10', '1', "", "", '5J20_10.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('112', 'Electricity & Magnetism', 'Inductance', 'RLC Circuits - De', 'LRC Ringing', '5J30.10', '1', "", "", '5J30_10.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('113', 'Electricity & Magnetism', 'Electromagnetic Induction', 'Induced Currents And Forces', 'Move Wire In Horseshoe Magnet', '5K10.15', '1', "", "", '5K10_15.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('114', 'Electricity & Magnetism', 'Electromagnetic Induction', 'Induced Currents And Forces', 'Induction Coil With Magnet', '5K10.20', '1', "", "", '5K10_20.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('115', 'Electricity & Magnetism', 'Electromagnetic Induction', 'Induced Currents And Forces', 'Induction Coils With Battery', '5K10.30', '1', "", "", '5K10_30.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('116', 'Electricity & Magnetism', 'Electromagnetic Induction', 'Eddy Currents', 'Damped Pendulum', '5K20.15', '1', "", "", '5K20_15.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('117', 'Electricity & Magnetism', 'Electromagnetic Induction', 'Eddy Currents', 'Magnets And Tubes', '5K20.25', '1', "", "", '5K20_25.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('118', 'Electricity & Magnetism', 'Electromagnetic Induction', 'Eddy Currents', 'Jumping Ring', '5K20.30', '1', "", "", '5K20_30.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('119', 'Electricity & Magnetism', 'Electromagnetic Induction', 'Transformers', 'Vertical Transformer', '5K30.30', '1', "", "", '5K30_30.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('120', 'Electricity & Magnetism', 'Electromagnetic Induction', 'Motors And Generators', 'DC Motor', '5K40.10', '1', "", "", '5K40_10.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('121', 'Electricity & Magnetism', 'Electromagnetic Induction', 'Motors And Generators', 'DC & AC Generators On Galvanometer', '5K40.20', '1', "", "", '5K40_20.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('122', 'Electricity & Magnetism', 'Electromagnetic Induction', 'Motors And Generators', 'DC & AC Generators On Scope', '5K40.25', '1', "", "", '5K40_25.GIF', "", "", '20000709124228');

INSERT INTO demotable VALUES('123', 'Electricity & Magnetism', 'Electromagnetic Induction', 'Motors And Generators', 'Motor/Generator', '5K40.40', '1', "", "", '5K40_40.GIF', "", "", '20000709124228');

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INSERT INTO demotable VALUES( '124', 'Electricity & Magnetism', 'Electromagnetic
Induction', 'Motors And Generators', 'Hand Crank Generator', '5K40.80', '1', "", "",
'5K40_80.GIF', "", "", "", '20000709124228');
INSERT INTO demotable VALUES( '125', 'Electricity & Magnetism', 'Ac Circuits',
'Filters And Rectifiers', 'Blinky Whirligig', '5L30.20', '1', "", "", '5L30_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '126', 'Electricity & Magnetism', 'Electromagnetic
Radiation', 'Tesla Coil', 'Tesla Coil', '5N20.40', '1', "", "", '5N20_40.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '127', 'Electricity & Magnetism', 'Electromagnetic
Radiation', 'Tesla Coil', 'Glowing Fluorescent LAMP', '5N20.50', '1', "", "", '5N20_50.GIF',
"", "", '20000709124228');
INSERT INTO demotable VALUES( '128', 'Electricity & Magnetism', 'Electromagnetic
Radiation', 'Tesla Coil', 'Skin Effect', '5N20.60', '1', "", "", '5N20_60.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '129', 'Electricity & Magnetism', 'Electromagnetic
Radiation', 'Electromagnetic Spectrum', 'Projected Spectrum With Prism', '5N30.10', '1', "",
'', '5N30_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '130', 'Electricity & Magnetism', 'Electromagnetic
Radiation', 'Electromagnetic Spectrum', 'Microwave Transmitter & Reciever', '5N30.30',
'1', "", "", '5N30_30.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '131', 'Optics', 'Geometric Optics', 'Speed of Light',
'Speed of Light-Moving Reflector', '6A01.10', '0', "", "", '6A01_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '132', 'Optics', 'Geometric Optics', 'Speed of Light',
'Light In A Vacuum', '6A02.10', '0', "", "", '6A02_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '133', 'Optics', 'Geometric Optics', 'Speed of Light',
'Straight Line Propagation-Shadows', '6A02.15', '1', "", "", '6A02_15.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '134', 'Optics', 'Geometric Optics', 'Reflection From
Flat Surfaces', 'Optical Disk With Flat Mirror', '6A10.11', '0', "", "", '6A10_11.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '135', 'Optics', 'Geometric Optics', 'Reflection From
Flat Surfaces', 'Laser And Flat Mirror', '6A10.15', '1', "", "", '6A10_15.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '136', 'Optics', 'Geometric Optics', 'Reflection From
Flat Surfaces', 'Diffuse And Specular Reflection', '6A10.20', '0', "", "", '6A10_20.GIF', "",
'', '20000709124228');
INSERT INTO demotable VALUES( '137', 'Optics', 'Geometric Optics', 'Reflection From
Flat Surfaces', 'Aluminum Foil Reflection', '6A10.22', '1', "", "", '6A10_22.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '138', 'Optics', 'Geometric Optics', 'Reflection From
Flat Surfaces', 'Large Corner Cube', '6A10.31', '1', "", "", '6A10_31.GIF', "", "",
'20000709124228');

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INSERT INTO demotable VALUES( '139', 'Optics', 'Geometric Optics', 'Reflection From
Flat Surfaces', 'Angled Mirrors', '6A10.40', '0', "", "", '6A10_40.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '140', 'Optics', 'Geometric Optics', 'Reflection From
Flat Surfaces', 'Parallel Mirrors', '6A10.45', '0', "", "", '6A10_45.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '141', 'Optics', 'Geometric Optics', 'Reflection From
Flat Surfaces', 'Full View Mirror', '6A10.50', '0', "", "", '6A10_50.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '142', 'Optics', 'Geometric Optics', 'Reflection From
Flat Surfaces', 'Cold Candle', '6A10.60', '0', "", "", '6A10_60.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '143', 'Optics', 'Geometric Optics', 'Reflection From
Curved Surfaces', 'Optical Disc With Curved Mirrors', '6A20.11', '0', "", "", '6A20_11.GIF',
"", "", '20000709124228');
INSERT INTO demotable VALUES( '144', 'Optics', 'Geometric Optics', 'Reflection From
Curved Surfaces', 'Parallel Lasers And Curved Mirrors', '6A20.15', '1', "", "",
'6A20_15.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '145', 'Optics', 'Geometric Optics', 'Reflection From
Curved Surfaces', 'Mirror & Rose', '6A20.30', '0', "", "", '6A20_30.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '146', 'Optics', 'Geometric Optics', 'Reflection From
Curved Surfaces', 'Optic Mirage', '6A20.35', '1', "", "", '6A20_35.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '147', 'Optics', 'Geometric Optics', 'Reflection From
Curved Surfaces', 'Projected Arrow With Mirror', '6A20.40', '0', "", "", '6A20_40.GIF', "",
"", '20000709124228');
INSERT INTO demotable VALUES( '148', 'Optics', 'Geometric Optics', 'Reflection From
Curved Surfaces', 'Projected Filament With Mirror', '6A20.41', '0', "", "", '6A20_41.GIF', "",
"", '20000709124228');
INSERT INTO demotable VALUES( '149', 'Optics', 'Geometric Optics', 'Refractive
Index', 'Count Fringes', '6A40.20', '0', "", "", '6A40_20.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '150', 'Optics', 'Geometric Optics', 'Refractive
Index', 'Cheshire Cat', '6A40.30', '0', "", "", '6A40_30.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '151', 'Optics', 'Geometric Optics', 'Refraction At
Flat Surfaces', 'Optical Disk With Glass Block', '6A42.11', '0', "", "", '6A42_11.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '152', 'Optics', 'Geometric Optics', 'Refraction At
Flat Surfaces', 'Big Plastic Refraction Tank', '6A42.20', '0', "", "", '6A42_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '153', 'Optics', 'Geometric Optics', 'Refraction At
Flat Surfaces', 'Nakamara Refraction Tank', '6A42.21', '0', "", "", '6A42_21.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '154', 'Optics', 'Geometric Optics', 'Refraction At
Flat Surfaces', 'Ripple Tank Refraction', '6A42.35', '0', "", "", '6A42_35.GIF', "", "",
'20000709124228');

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INSERT INTO demotable VALUES( '155', 'Optics', 'Geometric Optics', 'Refraction At
Flat Surfaces', 'Penny In A Cup', '6A42.40', '0', "", "", '6A42_40.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '156', 'Optics', 'Geometric Optics', 'Refraction At
Flat Surfaces', 'Paraffin Prism And Microwaves', '6A42.55', '0', "", "", '6A42_55.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '157', 'Optics', 'Geometric Optics', 'Total Internal
Reflection', 'Optical Disk With Prism, Semicircle', '6A44.11', '0', "", "", '6A44_11.GIF', "", "",
'', '20000709124228');
INSERT INTO demotable VALUES( '158', 'Optics', 'Geometric Optics', 'Total Internal
Reflection', 'Big Plastic Refraction Tank', '6A44.20', '0', "", "", '6A44_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '159', 'Optics', 'Geometric Optics', 'Total Internal
Reflection', 'Laser And Fiver Optics', '6A44.40', '1', "", "", '6A44_40.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '160', 'Optics', 'Geometric Optics', 'Total Internal
Reflection', 'Steal The Signal', '6A44.42', '0', "", "", '6A44_42.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '161', 'Optics', 'Geometric Optics', 'Total Internal
Reflection', 'Ring Of Light', '6A44.50', '0', "", "", '6A44_50.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '162', 'Optics', 'Geometric Optics', 'Rainbow',
'Rainbow', '6A46.10', '0', "", "", '6A46_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '163', 'Optics', 'Geometric Optics', 'Rainbow',
'Optical Disc With Spherical Lens', '6A46.30', '0', "", "", '6A46_30.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '164', 'Optics', 'Geometric Optics', 'Thin Lenses',
'Optical Disk With Thin Lens', '6A60.11', '0', "", "", '6A60_11.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '165', 'Optics', 'Geometric Optics', 'Thin Lenses',
'Ripple Tank Convex Lens', '6A60.15', '0', "", "", '6A60_15.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '166', 'Optics', 'Geometric Optics', 'Thin Lenses',
'Ripple Tank Concave Lens', '6A60.16', '0', "", "", '6A60_16.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '167', 'Optics', 'Geometric Optics', 'Thin Lenses',
'Parallel Lasers And Lenses', '6A60.20', '0', "", "", '6A60_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '168', 'Optics', 'Geometric Optics', 'Thin Lenses',
'Projected Filament With Lenses', '6A60.30', '0', "", "", '6A60_30.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '169', 'Optics', 'Geometric Optics', 'Thin Lenses',
'Projected Arrow With Lens', '6A60.31', '0', "", "", '6A60_31.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '170', 'Optics', 'Geometric Optics', 'Thin Lenses',
'Position Of Virtual Image', '6A60.45', '0', "", "", '6A60_45.GIF', "", "", '20000709124228');

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INSERT INTO demotable VALUES( '171', 'Optics', 'Geometric Optics', 'Thin Lenses',
'Pinholes Projected With A Lens', '6A60.50', '0', ", ", '6A60_50.GIF', ", ", ",
'20000709124228');
INSERT INTO demotable VALUES( '172', 'Optics', 'Geometric Optics', 'Thin Lenses',
'Paraffin Lens And Microwaves', '6A60.60', '0', ", ", '6A60_60.GIF', ", ", ",
'20000709124228');
INSERT INTO demotable VALUES( '173', 'Optics', 'Geometric Optics', 'Pinhole',
'Pinhole Camera', '6A61.20', '0', ", ", '6A61_20.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '174', 'Optics', 'Geometric Optics', 'Thick Lenses',
'Chromatic Aberration', '6A65.20', '1', ", ", '6A65_20.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '175', 'Optics', 'Geometric Optics', 'Thick Lenses',
'Barrel And Pincushion Distortion', '6A65.30', '1', ", ", '6A65_30.GIF', ", ", ",
'20000709124228');
INSERT INTO demotable VALUES( '176', 'Optics', 'Geometric Optics', 'Optical
Instruments', 'Microscope Model', '6A70.10', '0', ", ", '6A70_10.GIF', ", ", ",
'20000709124228');
INSERT INTO demotable VALUES( '177', 'Optics', 'Geometric Optics', 'Optical
Instruments', 'Telescope Models', '6A70.20', '0', ", ", '6A70_20.GIF', ", ", ",
'20000709124228');
INSERT INTO demotable VALUES( '178', 'Optics', 'Photometry', 'Luminosity', 'Checker
Board', '6B10.10', '0', ", ", '6B10_10.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '179', 'Optics', 'Photometry', 'Luminosity', 'Paraffin
Block Photometer', '6B10.30', '0', ", ", '6B10_30.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '180', 'Optics', 'Photometry', 'Luminosity', 'Frosted
Globe-Surface Brightness', '6B10.50', '0', ", ", '6B10_50.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '181', 'Optics', 'Photometry', 'Luminosity', 'Frosted
Globes', '6B10.55', '0', ", ", '6B10_55.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '182', 'Optics', 'Photometry', 'Blackbodies', 'Variac
And Light Bulb', '6B40.10', '1', ", ", '6B40_10.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '183', 'Optics', 'Photometry', 'Blackbodies', 'Hole In
A Box', '6B40.20', '0', ", ", '6B40_20.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '184', 'Optics', 'Photometry', 'Blackbodies', 'Carbon
Block', '6B40.25', '0', ", ", '6B40_25.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '185', 'Optics', 'Photometry', 'Blackbodies', 'Carbon
Rod', '6B40.26', '0', ", ", '6B40_26.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '186', 'Optics', 'Photometry', 'Blackbodies', 'X-Y
Spectrum Recorder', '6B40.40', '0', ", ", '6B40_40.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '187', 'Optics', 'Diffraction', 'Diffraction Through
One Slit', 'Single Slit And Laser', '6C10.10', '1', ", ", '6C10_10.GIF', ", ", ",
'20000709124228');
INSERT INTO demotable VALUES( '188', 'Optics', 'Diffraction', 'Diffraction Through
One Slit', 'Cornell Plate-Single Slit', '6C10.12', '0', ", ", '6C10_12.GIF', ", ", ",
'20000709124228');
INSERT INTO demotable VALUES( '189', 'Optics', 'Diffraction', 'Diffraction Through
One Slit', 'Microwave Diffraction', '6C10.50', '1', ", ", '6C10_50.GIF', ", ", ",
'20000709124228');

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INSERT INTO demotable VALUES( '190', 'Optics', 'Diffraction', 'Diffraction Around
Objects', 'Laser And Diffraction Objects', '6C20.10', '1', ", ", '6C20_10.GIF', ", ", ",
'20000709124228');
INSERT INTO demotable VALUES( '191', 'Optics', 'Diffraction', 'Diffraction Around
Objects', 'Thin Wire Diffraction', '6C20.20', '0', ", ", '6C20_20.GIF', ", ", ",
'20000709124228');
INSERT INTO demotable VALUES( '192', 'Optics', 'Diffraction', 'Diffraction Around
Objects', 'Pinhole Diffraction', '6C20.30', '1', ", ", '6C20_30.GIF', ", ", ",
'20000709124228');
INSERT INTO demotable VALUES( '193', 'Optics', 'Interference', 'Interference From
Two Sources', 'Interference Model', '6D10.05', '0', ", ", '6D10_05.GIF', ", ", ",
'20000709124228');
INSERT INTO demotable VALUES( '194', 'Optics', 'Interference', 'Interference From
Two Sources', 'Double Slits And Laser', '6D10.10', '1', ", ", '6D10_10.GIF', ", ", ",
'20000709124228');
INSERT INTO demotable VALUES( '195', 'Optics', 'Interference', 'Interference From
Two Sources', 'Cornell Plate-Two SLit', '6D10.11', '0', ", ", '6D10_11.GIF', ", ", ",
'20000709124228');
INSERT INTO demotable VALUES( '196', 'Optics', 'Interference', 'Interference From
Two Sources', 'Microwave Two Slit Interference', '6D10.20', '1', ", ", '6D10_20.GIF', ", ",
", '20000709124228');
INSERT INTO demotable VALUES( '197', 'Optics', 'Interference', 'Interference From
Two Sources', 'Microwave Two Source Interference', '6D10.25', '0', ", ", '6D10_25.GIF', ",
", ", '20000709124228');
INSERT INTO demotable VALUES( '198', 'Optics', 'Interference', 'Gratings', 'Cornell
Plate-Multiple Slits', '6D20.10', '0', ", ", '6D20_10.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '199', 'Optics', 'Interference', 'Gratings', 'Gratings
And Laser', '6D20.15', '1', ", ", '6D20_15.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '200', 'Optics', 'Interference', 'Gratings', 'Projected
Spectra With Grating', '6D20.20', '0', ", ", '6D20_20.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '201', 'Optics', 'Interference', 'Gratings', 'Crossed
Gratings And Laser', '6D20.50', '0', ", ", '6D20_50.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '202', 'Optics', 'Interference', 'Gratings', 'Regular
And Irregular Patterns', '6D20.56', '1', ", ", '6D20_56.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '203', 'Optics', 'Interference', 'Thin Films',
'Newton\'s Rings', '6D30.10', '0', ", ", '6D30_10.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '204', 'Optics', 'Interference', 'Gratings', 'Soap Film
Interference', '6D30.20', '1', ", ", '6D30_20.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '205', 'Optics', 'Interference', 'Gratings', 'Air
Wedge', '6D30.30', '0', ", ", '6D30_30.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '206', 'Optics', 'Interference', 'Interferometers',
'Michelson Interferometer', '6D40.10', '0', ", ", '6D40_10.GIF', ", ", ", '20000709124228');
INSERT INTO demotable VALUES( '207', 'Optics', 'Interference', 'Interferometers',
'Microwave Interferometer', '6D40.25', '1', ", ", '6D40_25.GIF', ", ", ", '20000709124228');

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INSERT INTO demotable VALUES( '208', 'Optics', 'Color', 'Synthesis And Analysis Of
Light And Colo', 'Color Box', '6F10.10', '0', "", "", '6F10_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '209', 'Optics', 'Color', 'Synthesis And Analysis Of
Light And Colo', 'Color Filters', '6F10.20', '0', "", "", '6F10_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '210', 'Optics', 'Color', 'Synthesis And Analysis Of
Light And Colo', 'Colors In Spectral Light', '6F10.75', '0', "", "", '6F10_75.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '211', 'Optics', 'Color', 'Scattering', 'Sunset',
'6F40.10', '0', "", "", '6F40_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '212', 'Optics', 'Polarization', 'Dichroic
Polarization', 'Polaroids On The Overhead', '6H10.10', '1', "", "", '6H10_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '213', 'Optics', 'Polarization', 'Dichroic
Polarization', 'Microwave Polarization', '6H10.20', '1', "", "", '6H10_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '214', 'Optics', 'Polarization', 'Polarization By
Reflection', 'Brewster\'s Angle', '6H20.10', '0', "", "", '6H20_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '215', 'Optics', 'Polarization', 'Circular Polarization',
'Three Polaroids', '6H30.10', '1', "", "", '6H30_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '216', 'Optics', 'Polarization', 'Birefringence',
'Birefringent Crystals', '6H35.10', '1', "", "", '6H35_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '217', 'Optics', 'Polarization', 'Birefringence',
'Plexiglass Birefringence', '6H35.17', '1', "", "", '6H35_17.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '218', 'Optics', 'Polarization', 'Birefringence', 'Stress
Plastic', '6H35.50', '1', "", "", '6H35_50.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '219', 'Optics', 'Polarization', 'Birefringence',
'Butterfly. Etc.', '6H35.53', '1', "", "", '6H35_53.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '220', 'Optics', 'Vision', 'The Eye', 'Eye Model',
'6J10.10', '1', "", "", '6J10_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '221', 'Optics', 'Vision', 'The Eye', 'Blind Spot',
'6J10.30', '1', "", "", '6J10_30.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '222', 'Optics', 'Vision', 'Physiology', 'Persistence
Of Vision', '6J11.30', '1', "", "", '6J11_30.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '223', 'Thermodynamics', 'Thermal Properties Of
Matter', 'Liquid Expansion', 'Bimetal Strip', '4A30.15', '1', "", "", '4A30_15.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '224', 'Thermodynamics', 'Thermal Properties Of
Matter', 'Liquid Expansion', 'Balls And Ring', '4A30.20', '1', "", "", '4A30_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '225', 'Thermodynamics', 'Thermal Properties Of
Matter', 'Liquid Expansion', 'Heat Rubber Bands', '4A30.80', '1', "", "", '4A30_80.GIF', "",
", '20000709124228');

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INSERT INTO demotable VALUES( '226', 'Thermodynamics', 'Thermal Properties Of
Matter', 'Properties Of Materials At Low Temperatu', 'Lead Bell', '4A40.10', '1', "", "",
'4A40_10.GIF', "", "", "", '20000709124228');
INSERT INTO demotable VALUES( '227', 'Thermodynamics', 'Thermal Properties Of
Matter', 'Properties Of Materials At Low Temperatu', 'Solder Spring', '4A40.15', '1', "", "",
'4A40_15.GIF', "", "", "", '20000709124228');
INSERT INTO demotable VALUES( '228', 'Thermodynamics', 'Thermal Properties Of
Matter', 'Properties Of Materials At Low Temperatu', 'Smashing Rose And Tube',
'4A40.30', '1', "", "", '4A40_30.GIF', "", "", "", '20000709124228');
INSERT INTO demotable VALUES( '229', 'Thermodynamics', 'Thermal Properties Of
Matter', 'Properties Of Materials At Low Temperatu', 'Cool Rubber Band', '4A40.35', '1',
"", "", '4A40_35.GIF', "", "", "", '20000709124228');
INSERT INTO demotable VALUES( '230', 'Thermodynamics', 'Heat And The First Law',
'Heat Transfer Applications', 'Boil Water In A Paper Cup', '4B50.20', '1', "", "",
'4B50_20.GIF', "", "", "", '20000709124228');
INSERT INTO demotable VALUES( '231', 'Thermodynamics', 'Heat And The First Law',
'Heat Transfer Applications', 'Water Balloon Heat Capacity', '4B50.25', '1', "", "",
'4B50_25.GIF', "", "", "", '20000709124228');
INSERT INTO demotable VALUES( '232', 'Thermodynamics', 'Heat And The First Law',
'Heat Transfer Applications', 'Finger In Hot Oil', '4B50.35', '1', "", "", '4B50_35.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '233', 'Thermodynamics', 'Heat And The First Law',
'Heat Transfer Applications', 'Reverse Leidenfrost', '4B50.40', '1', "", "", '4B50_40.GIF', "", "",
'', '20000709124228');
INSERT INTO demotable VALUES( '234', 'Thermodynamics', 'Heat And The First Law',
'Mechanical Equivalent Of Heat', 'Dropping Lead Shot', '4B60.10', '1', "", "",
'4B60_10.GIF', "", "", "", '20000709124228');
INSERT INTO demotable VALUES( '235', 'Thermodynamics', 'Change Of State', 'Phase
Changes: Liquid-Gas', 'Burst A Balloon', '4C30.35', '1', "", "", '4C30_35.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '236', 'Thermodynamics', 'Change Of State',
'Cooling By Evaporation', 'Cryophorus', '4C31.10', '1', "", "", '4C31_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '237', 'Thermodynamics', 'Change Of State',
'Critical Point', 'Critical Opalescence', '4C50.20', '1', "", "", '4C50_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '238', 'Thermodynamics', 'Kinetic Theory', 'Mean
Free Path', 'Crookes\ Radiometer', '4D20.10', '1', "", "", '4D20_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '239', 'Thermodynamics', 'Gas Law', 'Constant
Pressure', 'Balloon In Liquid Nitrogen', '4E10.20', '1', "", "", '4E10_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '240', 'Thermodynamics', 'Gas Law', 'Constant
Temperature', 'Balloon In A Vacuum', '4E20.40', '1', "", "", '4E20_40.GIF', "", "",
'20000709124228');

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INSERT INTO demotable VALUES( '241', 'Thermodynamics', 'Gas Law', 'Constant
Volume', 'Constant Volume Bulb', '4E30.10', '1', "", "", '4E30_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '242', 'Thermodynamics', 'Entropy And The Second
Law', 'Entropy', 'Time Reversal', '4F10.10', '1', "", "", '4F10_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '243', 'Waves & Oscillations', 'Oscillations',
'Pendula', 'Simple Pendulum', '3A10.10', '1', "", "", '3A10_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '244', 'Waves & Oscillations', 'Oscillations',
'Pendula', '4:1 Pendulum', '3A10.14', '1', "", "", '3A10_14.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '245', 'Waves & Oscillations', 'Oscillations',
'Pendula', 'Torsion Pendulum', '3A10.30', '1', "", "", '3A10_30.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '246', 'Waves & Oscillations', 'Oscillations',
'Physical Pendula', 'Sweet Spot Of A Meter Stick', '3A15.57', '1', "", "", '3A15_57.GIF', "",
'', '20000709124228');
INSERT INTO demotable VALUES( '247', 'Waves & Oscillations', 'Oscillations',
'Springs And Oscillators', 'Mass On A Spring', '3A20.10', '1', "", "", '3A20_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '248', 'Waves & Oscillations', 'Oscillations',
'Springs And Oscillators', 'Springs In Series And Parallel', '3A20.20', '1', "", "",
'3A20_20.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '249', 'Waves & Oscillations', 'Oscillations',
'Springs And Oscillators', 'Air Track Glider And Spring', '3A20.30', '1', "", "",
'3A20_30.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '250', 'Waves & Oscillations', 'Oscillations',
'Springs And Oscillators', 'Air Track Glider Between Springs', '3A20.35', '1', "", "",
'3A20_35.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '251', 'Waves & Oscillations', 'Oscillations', 'Simple
Harmonic Motion', 'SHM Slide', '3A40.35', '1', "", "", '3A40_35.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '252', 'Waves & Oscillations', 'Oscillations', 'Driven
Mechanical Resonance', 'Tacoma Narrows Film/Video', '3A60.10', '1', "", "",
'3A60_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '253', 'Waves & Oscillations', 'Oscillations', 'Driven
Mechanical Resonance', 'Driven Glider On Air Track', '3A60.20', '1', "", "", '3A60_20.GIF',
"", "", '20000709124228');
INSERT INTO demotable VALUES( '254', 'Waves & Oscillations', 'Oscillations',
'Coupled Oscillations', 'Swinging Mass On A Spring', '3A70.15', '1', "", "", '3A70_15.GIF',
"", "", '20000709124228');
INSERT INTO demotable VALUES( '255', 'Waves & Oscillations', 'Oscillations',
'Coupled Oscillations', 'Coupled Pendula', '3A70.20', '1', "", "", '3A70_20.GIF', "", "",
'20000709124228');

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INSERT INTO demotable VALUES( '256', 'Waves & Oscillations', 'Oscillations',
'Coupled Oscillations', 'Spring Coupled Pendula', '3A70.25', '1', "", "", '3A70_25.GIF', "", "",
'', '20000709124228');
INSERT INTO demotable VALUES( '257', 'Waves & Oscillations', 'Oscillations',
'Coupled Oscillations', 'String Coupled Pendula', '3A70.30', '1', "", "", '3A70_30.GIF', "", "",
'', '20000709124228');
INSERT INTO demotable VALUES( '258', 'Waves & Oscillations', 'Oscillations',
'Lissajous Figures', 'Lissajous Figures-Scope', '3A80.20', '1', "", "", '3A80_20.GIF', "", "",
'', '20000709124228');
INSERT INTO demotable VALUES( '259', 'Waves & Oscillations', 'Oscillations', 'Non-
Linear Systems', 'Pump A Swing', '3A95.70', '1', "", "", '3A95_70.GIF', "", "",
'', '20000709124228');
INSERT INTO demotable VALUES( '260', 'Waves & Oscillations', 'Wave Motion',
'Transverse Pulses And Waves', 'The Wave - Transverse', '3B10.05', '1', "", "",
'3B10_05.GIF', "", "", '', '20000709124228');
INSERT INTO demotable VALUES( '261', 'Waves & Oscillations', 'Wave Motion',
'Transverse Pulses And Waves', 'Pulse On A Rope', '3B10.10', '1', "", "", '3B10_10.GIF', "",
'', '20000709124228');
INSERT INTO demotable VALUES( '262', 'Waves & Oscillations', 'Wave Motion',
'Transverse Pulses And Waves', 'Speed Of A Slinky Pulse', '3B10.17', '1', "", "",
'3B10_17.GIF', "", "", '', '20000709124228');
INSERT INTO demotable VALUES( '263', 'Waves & Oscillations', 'Wave Motion',
'Transverse Pulses And Waves', 'Speed Of A Pulses On Rope', '3B10.18', '1', "", "",
'3B10_18.GIF', "", "", '', '20000709124228');
INSERT INTO demotable VALUES( '264', 'Waves & Oscillations', 'Wave Motion',
'Transverse Pulses And Waves', 'Slinky On Table', '3B10.20', '1', "", "", '3B10_20.GIF', "", "",
'', '20000709124228');
INSERT INTO demotable VALUES( '265', 'Waves & Oscillations', 'Wave Motion',
'Longitudinal Pulses And Waves', 'The Wave-Longitudinal', '3B20.05', '1', "", "",
'3B20_05.GIF', "", "", '', '20000709124228');
INSERT INTO demotable VALUES( '266', 'Waves & Oscillations', 'Wave Motion',
'Wave Properties And Sound', 'Speed Of Sound By Phase Difference', '3B30.10', '1', "", "",
'3B30_10.GIF', "", "", '', '20000709124228');
INSERT INTO demotable VALUES( '267', 'Waves & Oscillations', 'Wave Motion',
'Wave Properties And Sound', 'Bell In A Vacuum', '3B30.30', '1', "", "", '3B30_30.GIF', "", "",
'', '20000709124228');
INSERT INTO demotable VALUES( '268', 'Waves & Oscillations', 'Wave Motion',
'Wave Properties And Sound', 'Speaker And Candle', '3B30.40', '1', "", "", '3B30_40.GIF', "",
'', '20000709124228');
INSERT INTO demotable VALUES( '269', 'Waves & Oscillations', 'Wave Motion',
'Wave Properties And Sound', 'Helium Talk', '3B30.50', '1', "", "", '3B30_50.GIF', "", "",
'', '20000709124228');
INSERT INTO demotable VALUES( '270', 'Waves & Oscillations', 'Wave Motion',
'Doppler Effect', 'Doppler Buzzer', '3B40.10', '1', "", "", '3B40_10.GIF', "", "",
'', '20000709124228');

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INSERT INTO demotable VALUES( '271', 'Waves & Oscillations', 'Wave Motion',
'Interference And Diffraction', 'Ripple Tank-Single Slit', '3B50.10', '1', "", "",
'3B50_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '272', 'Waves & Oscillations', 'Wave Motion',
'Interference And Diffraction', 'Ripple Tank-Two Point', '3B50.20', '1', "", "",
'3B50_20.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '273', 'Waves & Oscillations', 'Wave Motion',
'Interference And Diffraction', 'Ripple Tank-Double Slit', '3B50.25', '1', "", "",
'3B50_25.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '274', 'Waves & Oscillations', 'Wave Motion',
'Beats', 'Beat Forks', '3B60.10', '1', "", "", '3B60_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '275', 'Waves & Oscillations', 'Wave Motion',
'Beats', 'Beats On Scope', '3B60.20', '1', "", "", '3B60_20.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '276', 'Waves & Oscillations', 'Wave Motion',
'Coupled Resonators', 'Sympathetic Resonance', '3B70.10', '1', "", "", '3B70_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '277', 'Waves & Oscillations', 'Acoustics', 'Pitch',
'Range Of Hearing', '3C20.10', '1', "", "", '3C20_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '278', 'Waves & Oscillations', 'Instruments',
'Resonance In Strings', 'Sonometer', '3D20.10', '1', "", "", '3D20_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '279', 'Waves & Oscillations', 'Instruments',
'Resonance In Cavaties', 'Vertical Resonance Tube', '3D30.10', '1', "", "", '3D30_10.GIF', "",
'', '20000709124228');
INSERT INTO demotable VALUES( '280', 'Waves & Oscillations', 'Instruments',
'Resonance In Cavaties', 'Hoot Tubes', '3D30.70', '1', "", "", '3D30_70.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '281', 'Waves & Oscillations', 'Instruments', 'Air
Column Instruments', 'Organ Pipes', '3D32.10', '1', "", "", '3D32_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '282', 'Waves & Oscillations', 'Instruments',
'Resonance In Plates, Bars, Solids', 'Chladni Plate', '3D40.30', '1', "", "", '3D40_30.GIF', "",
'', '20000709124228');
INSERT INTO demotable VALUES( '283', 'Mechanics', 'Measurement', 'Basic Units',
'Standards Of Mass', '1A10.20', '1', "", "", '1A10_20.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '284', 'Mechanics', 'Measurement', 'Basic Units',
'Standards Of Length', '1A10.30', '1', "", "", '1A10_30.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '285', 'Mechanics', 'Measurement', 'Basic Units', '1
\Nsec\''', '1A10.36', '1', "", "", '1A10_36.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '286', 'Mechanics', 'Measurement', 'Basic Units',
'Clocks', '1A10.40', '1', "", "", '1A10_40.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '287', 'Mechanics', 'Measurement', 'Basic Units',
'One Liter Cube', '1A10.50', '1', "", "", '1A10_50.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '288', 'Mechanics', 'Measurement', 'Basic Units',
'Mass, Volume, And Density', '1A10.55', '1', "", "", '1A10_55.GIF', "", "",
'20000709124228');

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INSERT INTO demotable VALUES( '289', 'Mechanics', 'Measurement', 'Basic Units',
'Avagadro\'s Number Box', '1A10.60', '1', " ", " ", '1A10_60.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '290', 'Mechanics', 'Measurement', 'Basic Units',
'Mole Samples', '1A10.65', '1', " ", " ", '1A10_65.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '291', 'Mechanics', 'Measurement', 'Basic Units',
'Density Samples', '1A10.70', '1', " ", " ", '1A10_70.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '292', 'Mechanics', 'Measurement', 'Coordinate
Systmes', 'XYZ Axes', '1A30.10', '1', " ", " ", '1A30_10.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '293', 'Mechanics', 'Measurement', 'Coordinate
Systmes', 'Chalkboard Globe', '1A30.40', '1', " ", " ", '1A30_40.GIF', " ", " ",
'20000709124228');
INSERT INTO demotable VALUES( '294', 'Mechanics', 'Measurement', 'Vectors',
'Components Of Vectors', '1A40.10', '1', " ", " ", '1A40_10.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '295', 'Mechanics', 'Measurement', 'Vectors',
'Folding Rule', '1A40.20', '1', " ", " ", '1A40_20.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '296', 'Mechanics', 'Measurement', 'Vectors',
'Vector Addition And Subtraction', '1A40.30', '1', " ", " ", '1A40_30.GIF', " ", " ",
'20000709124228');
INSERT INTO demotable VALUES( '297', 'Mechanics', 'Measurement', 'Math Topics',
'Radian', '1A50.10', '1', " ", " ", '1A50_10.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '298', 'Mechanics', 'Motion In One Dimension',
'VeLOCITY', 'Air Track And Glider', '1C10.25', '1', " ", " ", '1C10_25.GIF', " ", " ",
'20000709124228');
INSERT INTO demotable VALUES( '299', 'Mechanics', 'Motion In One Dimension',
'VeLOCITY', 'Velocity-Air Track And Glider', '1C10.27', '1', " ", " ", '1C10_27.GIF', " ", " ",
'20000709124228');
INSERT INTO demotable VALUES( '300', 'Mechanics', 'Motion In One Dimension',
'VeLOCITY', 'Approaching Instantaneous Velocity', '1C10.30', '1', " ", " ", '1C10_30.GIF', " ", " ",
'20000709124228');
INSERT INTO demotable VALUES( '301', 'Mechanics', 'Motion In One Dimension',
'Uniform Acceleration', 'Penny And Feather', '1C20.10', '1', " ", " ", '1C20_10.GIF', " ", " ",
'20000709124228');
INSERT INTO demotable VALUES( '302', 'Mechanics', 'Motion In One Dimension',
'Uniform Acceleration', 'Drop Lead And Cork Balls', '1C20.15', '1', " ", " ", '1C20_15.GIF', " ",
" ", '20000709124228');
INSERT INTO demotable VALUES( '303', 'Mechanics', 'Motion In One Dimension',
'Uniform Acceleration', 'Drop Ball And Paper', '1C20.16', '1', " ", " ", '1C20_16.GIF', " ", " ",
'20000709124228');
INSERT INTO demotable VALUES( '304', 'Mechanics', 'Motion In One Dimension',
'Uniform Acceleration', 'Equal Time Equal Distance Drop', '1C20.20', '1', " ", " ",
'1C20_20.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '305', 'Mechanics', 'Motion In One Dimension',
'Uniform Acceleration', 'Inclined Air Track', '1C20.30', '1', " ", " ", '1C20_30.GIF', " ", " ",
'20000709124228');

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INSERT INTO demotable VALUES( '306', 'Mechanics', 'Motion In One Dimension',
'Uniform Acceleration', 'Blinky Track', '1C20.40', '1', "", "", '1C20_40.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '307', 'Mechanics', 'Motion In One Dimension',
'Measuring g', 'Catch A Meter Stick', '1C30.55', '1', "", "", '1C30_55.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '308', 'Mechanics', 'Motion In Two Dimensions',
'Displacement In Two Dimensions', 'Mounted Wheels', '1D10.40', '1', "", "", '1D10_40.GIF',
"", "", '20000709124228');
INSERT INTO demotable VALUES( '309', 'Mechanics', 'Motion In Two Dimensions',
'Displacement In Two Dimensions', 'Ball On The Edge Of A Disk', '1D10.50', '1', "", "",
'1D10_50.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '310', 'Mechanics', 'Motion In Two Dimensions',
'Velocity, Position, And Acceleration', 'Ultrasonic Ranger And Student', '1D15.10', '1', "",
"", '1D15_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '311', 'Mechanics', 'Motion In Two Dimensions',
'Motion Of The Center Of Mass', 'Air Track Pendulum Glider', '1D40.50', '1', "", "",
'1D40_50.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '312', 'Mechanics', 'Motion In Two Dimensions',
'Motion Of The Center Of Mass', 'Air Track Inchworm', '1D40.55', '1', "", "",
'1D40_55.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '313', 'Mechanics', 'Motion In Two Dimensions',
'Central Forces', 'Ball On A String', '1D50.10', '1', "", "", '1D50_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '314', 'Mechanics', 'Motion In Two Dimensions',
'Central Forces', 'Whirligig', '1D50.20', '1', "", "", '1D50_20.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '315', 'Mechanics', 'Motion In Two Dimensions',
'Central Forces', 'Conical Pendulum', '1D50.25', '1', "", "", '1D50_25.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '316', 'Mechanics', 'Motion In Two Dimensions',
'Central Forces', 'Pail Of Water/Nails', '1D50.40', '1', "", "", '1D50_40.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '317', 'Mechanics', 'Motion In Two Dimensions',
'Central Forces', 'Welch Centripetal Force', '1D50.50', '1', "", "", '1D50_50.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '318', 'Mechanics', 'Motion In Two Dimensions',
'Centrifugal Escape', 'Grinding Wheel', '1D55.20', '1', "", "", '1D55_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '319', 'Mechanics', 'Motion In Two Dimensions',
'Centrifugal Escape', 'Falling Off The Merry-Go-Round', '1D55.30', '1', "", "",
'1D55_30.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '320', 'Mechanics', 'Motion In Two Dimensions',
'Projectile Motion', 'Ball To Throw', '1D60.05', '1', "", "", '1D60_05.GIF', "", "",
'20000709124228');

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INSERT INTO demotable VALUES( '321', 'Mechanics', 'Motion In Two Dimensions',
'Projectile Motion', 'Howitzer And Tunnel', '1D60.10', '1', "", "", '1D60_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '322', 'Mechanics', 'Motion In Two Dimensions',
'Projectile Motion', 'Howitzer And Tunnel On Incline', '1D60.15', '1', "", "", '1D60_15.GIF',
"", "", '20000709124228');
INSERT INTO demotable VALUES( '323', 'Mechanics', 'Motion In Two Dimensions',
'Projectile Motion', 'Simultaneous Fall', '1D60.20', '1', "", "", '1D60_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '324', 'Mechanics', 'Motion In Two Dimensions',
'Projectile Motion', 'Monkey And Hunter', '1D60.30', '1', "", "", '1D60_30.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '325', 'Mechanics', 'Motion In Two Dimensions',
'Projectile Motion', 'Water Through Trajectory', '1D60.65', '1', "", "", '1D60_65.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '326', 'Mechanics', 'Relative Motion', 'Rotating
Reference Frames', 'Foucault Pendulum', '1E20.10', '1', "", "", '1E20_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '327', 'Mechanics', 'Relative Motion', 'Rotating
Reference Frames', 'Foucault Pendulum Model', '1E20.20', '1', "", "", '1E20_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '328', 'Mechanics', 'Newtons First Law', 'Inertia Of
Rest', 'Inertia Balls', '1F20.10', '1', "", "", '1F20_10.GIF', "", "", '20000709172449');
INSERT INTO demotable VALUES( '329', 'Mechanics', 'Newtons First Law', 'Inertia Of
Rest', 'Smash Your Hand', '1F20.20', '1', "", "", '1F20_20.GIF', "", "", '20000709172532');
INSERT INTO demotable VALUES( '330', 'Mechanics', 'Newtons First Law', 'Inertia Of
Rest', 'Hit The Nail On The', '1F20.22', '1', "", "", '1F20_22.GIF', "", "", '20000709172924');
INSERT INTO demotable VALUES( '331', 'Mechanics', 'Newtons First Law', 'Inertia Of
Rest', 'Smash The Block', '1F20.25', '1', "", "", '1F20_25.GIF', "", "", '20000709172933');
INSERT INTO demotable VALUES( '332', 'Mechanics', 'Newtons First Law', 'Inertia Of
Motion', 'Persistence Of Motion', '1F30.10', '1', "", "", '1F30_10.GIF', "", "",
'20000709172936');
INSERT INTO demotable VALUES( '333', 'Mechanics', 'Newtons Second Law', 'Force,
Mass, And Acceleration', 'Constant Mass Acceleration System', '1G10.11', '1', "",
'1G10_11.GIF', "", "", '20000709172940');
INSERT INTO demotable VALUES( '334', 'Mechanics', 'Newtons Second Law', 'Force,
Mass, And Acceleration', 'Acceleration Block', '1G10.25', '1', "", "", '1G10_25.GIF', "", "",
'20000709172945');
INSERT INTO demotable VALUES( '335', 'Mechanics', 'Newtons Second Law', 'Force,
Mass, And Acceleration', 'Atwood\'s Machine', '1G10.40', '1', "", "", '1G10_40.GIF', "", "",
'20000709173000');
INSERT INTO demotable VALUES( '336', 'Mechanics', 'Newtons Second Law',
'Accelerated Reference Frames', 'Candle In A Bottle', '1G20.10', '1', "", "", '1G20_10.GIF',
"", "", '20000709173003');

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INSERT INTO demotable VALUES( '337', 'Mechanics', 'Newtons Second Law',
'Accelerated Reference Frames', 'Dropped Slinky', '1G20.45', '1', "", "", '1G20_45.GIF', "", "",
'', '20000709173011');
INSERT INTO demotable VALUES( '338', 'Mechanics', 'Statics Of Rigid Bodies',
'Finding Center Of Gravity', 'Map Of State', '1J10.10', '1', "", "", '1J10_10.GIF', "", "", "",
'20000709124228');
INSERT INTO demotable VALUES( '339', 'Mechanics', 'Statics Of Rigid Bodies',
'Finding Center Of Gravity', 'Center Of Gravity Of A Broom', '1J10.25', '1', "", "",
'1J10_25.GIF', "", "", "", '20000709124228');
INSERT INTO demotable VALUES( '340', 'Mechanics', 'Statics Of Rigid Bodies',
'Finding Center Of Gravity', 'Meter Stick On Fingers', '1J10.30', '0', "", "", '1J10_30.GIF', "",
'', "", '20000709013700');
INSERT INTO demotable VALUES( '341', 'Mechanics', 'Statics Of Rigid Bodies',
'Exceeding Center Of Gravity', 'Leaning Tower Of Pisa', '1J11.10', '1', "", "", '1J11_10.GIF',
'', "", '20000709124228');
INSERT INTO demotable VALUES( '342', 'Mechanics', 'Statics Of Rigid Bodies',
'Exceeding Center Of Gravity', 'Tower Of Lire', '1J11.20', '1', "", "", '1J11_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '343', 'Mechanics', 'Statics Of Rigid Bodies',
'Stable, Unstable, And Neutral Equalibriu', 'Fork, Spoon, And Match', '1J20.20', '1', "", "",
'1J20_20.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '344', 'Mechanics', 'Statics Of Rigid Bodies',
'Stable, Unstable, And Neutral Equalibriu', 'Nine Nails On One', '1J20.25', '1', "", "",
'1J20_25.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '345', 'Mechanics', 'Statics Of Rigid Bodies',
'Stable, Unstable, And Neutral Equalibriu', 'Spoon On Nose', '1J20.32', '1', "", "",
'1J20_32.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '346', 'Mechanics', 'Statics Of Rigid Bodies',
'Resolution Of Forces', 'Suspended Block', '1J30.10', '1', "", "", '1J30_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '347', 'Mechanics', 'Statics Of Rigid Bodies',
'Resolution Of Forces', 'Tension In A String', '1J30.20', '1', "", "", '1J30_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '348', 'Mechanics', 'Statics Of Rigid Bodies',
'Resolution Of Forces', 'Rope And Three Students', '1J30.25', '1', "", "", '1J30_25.GIF', "", "",
'', '20000709124228');
INSERT INTO demotable VALUES( '349', 'Mechanics', 'Statics Of Rigid Bodies',
'Resolution Of Forces', 'Sail Against The Wind', '1J30.60', '1', "", "", '1J30_60.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '350', 'Mechanics', 'Statics Of Rigid Bodies', 'Static
Torque', 'Opening A Door', '1J40.30', '1', "", "", '1J40_30.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '351', 'Mechanics', 'Applications Of Newtons
Laws', 'Dynamic Torque', 'Tipping Block', '1K10.10', '1', "", "", '1K10_10.GIF', "", "",
'20000709173026');

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INSERT INTO demotable VALUES( '352', 'Mechanics', 'Applications Of Newtons
Laws', 'Dynamic Torque', 'Walking The Spool', '1K10.30', '1', "", "", '1K10_30.GIF', "", "",
'20000709173030');
INSERT INTO demotable VALUES( '353', 'Mechanics', 'Applications Of Newtons
Laws', 'Friction', 'Friction Blocks-Surface Material', '1K20.10', '1', "", "", '1K20_10.GIF', "",
"", '20000709173034');
INSERT INTO demotable VALUES( '354', 'Mechanics', 'Applications Of Newtons
Laws', 'Friction', 'Weight Dependence Of Friction', '1K20.15', '1', "", "", '1K20_15.GIF', "", "",
'20000709173038');
INSERT INTO demotable VALUES( '355', 'Mechanics', 'Applications Of Newtons
Laws', 'Friction', 'Area Dependence Of Friction', '1K20.20', '1', "", "", '1K20_20.GIF', "", "",
'20000709173042');
INSERT INTO demotable VALUES( '356', 'Mechanics', 'Applications Of Newtons
Laws', 'Friction', 'Static Vs. Sliding Friction', '1K20.30', '1', "", "", '1K20_30.GIF', "", "",
'20000709173045');
INSERT INTO demotable VALUES( '357', 'Mechanics', 'Applications Of Newtons
Laws', 'Pressure', 'Bed Of Nails', '1K30.10', '1', "", "", '1K30_10.GIF', "", "",
'20000709173049');
INSERT INTO demotable VALUES( '358', 'Mechanics', 'Gravity', 'Universal
Gravitational Constant', 'Cavendish Balance', '1L10.30', '1', "", "", '1L10_30.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '359', 'Mechanics', 'Gravity', 'Orbits', 'Conic
Sections', '1L20.40', '1', "", "", '1L20_40.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '360', 'Mechanics', 'Work And Energy', 'Work',
'Shelf And Block', '1M10.10', '1', "", "", '1M10_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '361', 'Mechanics', 'Work And Energy', 'Simple
Machines', 'Pulleys', '1M20.10', '1', "", "", '1M20_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '362', 'Mechanics', 'Work And Energy',
'Conservation Of Energy', 'Loop The Loop', '1M40.20', '1', "", "", '1M40_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '363', 'Mechanics', 'Linear Momentum And
Collisions', 'Impulse And Thrust', 'Egg In Sheet', '1N10.20', '1', "", "", '1N10_20.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '364', 'Mechanics', 'Linear Momentum And
Collisions', 'Rockets', 'Fire Extinguisher Rocket', '1N22.10', '1', "", "", '1N22_10.GIF', "", "",
'20000709124228');
INSERT INTO demotable VALUES( '365', 'Mechanics', 'Linear Momentum And
Collisions', 'Collisions In One Dimension', 'Collision Balls', '1N30.10', '1', "", "",
'1N30_10.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '366', 'Mechanics', 'Linear Momentum And
Collisions', 'Collisions In One Dimension', 'Double Ball Bounce', '1N30.60', '1', "", "",
'1N30_60.GIF', "", "", '20000709124228');
INSERT INTO demotable VALUES( '367', 'Mechanics', 'Rotational Dynamics', 'Moment
Of Inertia', 'Inertia Wands And Two Students', '1Q10.10', '1', "", "", '1Q10_10.GIF', "", "",
'20000709124228');

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INSERT INTO demotable VALUES( '368', 'Mechanics', 'Rotational Dynamics', 'Moment
Of Inertia', 'Ring, Disk, And Sphere', '1Q10.30', '1', " ", " ", '1Q10_30.GIF', " ", " ",
'20000709124228');
INSERT INTO demotable VALUES( '369', 'Mechanics', 'Rotational Dynamics', 'Moment
Of Inertia', 'All Disks Roll The Same', '1Q10.35', '1', " ", " ", '1Q10_35.GIF', " ", " ",
'20000709124228');
INSERT INTO demotable VALUES( '370', 'Mechanics', 'Rotational Dynamics', 'Transfer
Of Angular Momentum', 'Passing The Wheel', '1Q30.10', '1', " ", " ", '1Q30_10.GIF', " ", " ",
'20000709124228');
INSERT INTO demotable VALUES( '371', 'Mechanics', 'Rotational Dynamics', 'Transfer
Of Angular Momentum', 'Drop Bags O\'Rice', '1Q30.20', '1', " ", " ", '1Q30_20.GIF', " ", " ",
'20000709124228');
INSERT INTO demotable VALUES( '372', 'Mechanics', 'Rotational Dynamics', 'Transfer
Of Angular Momentum', 'Catch The Ball On The Stool', '1Q30.30', '1', " ", " ",
'1Q30_30.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '373', 'Mechanics', 'Rotational Dynamics',
'Conservation Of Angular Momentum', 'Rotating Stool And Dumbbells', '1Q40.10', '1', " ",
", '1Q40_10.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '374', 'Mechanics', 'Rotational Dynamics',
'Conservation Of Angular Momentum', 'Pulling On The Whirligig', '1Q40.25', '1', " ", " ",
'1Q40_25.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '375', 'Mechanics', 'Rotational Dynamics',
'Conservation Of Angular Momentum', 'Hero\'s Engine', '1Q40.80', '1', " ", " ",
'1Q40_80.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '376', 'Mechanics', 'Rotational Dynamics', 'Gyros',
'Bicycle Wheel Gyro', '1Q50.20', '1', " ", " ", '1Q50_20.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '377', 'Mechanics', 'Rotational Dynamics', 'Gyros',
'Walking The Wheel', '1Q50.24', '1', " ", " ", '1Q50_24.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '378', 'Mechanics', 'Rotational Dynamics', 'Gyros',
'Gyro In Gimbals', '1Q50.35', '1', " ", " ", '1Q50_35.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '379', 'Mechanics', 'Rotational Dynamics', 'Gyros',
'Suitcase Gyro', '1Q50.40', '1', " ", " ", '1Q50_40.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '380', 'Mechanics', 'Rotational Dynamics',
'Rotational Stability', 'Bike Wheel Top', '1Q60.10', '1', " ", " ", '1Q60_10.GIF', " ", " ",
'20000709124228');
INSERT INTO demotable VALUES( '381', 'Mechanics', 'Elasticity', 'Hooke\'s Law',
'Stretching A Spring', '1R10.10', '1', " ", " ", '1R10_10.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '382', 'Mechanics', 'Elasticity', 'Shear Stress', 'Shear
Block', '1R30.10', '1', " ", " ", '1R30_10.GIF', " ", " ", '20000709124228');
INSERT INTO demotable VALUES( '383', 'Mechanics', 'Elasticity', 'Coefficient Of
Restitution', 'Bouncing Balls', '1R40.10', '1', " ", " ", '1R40_10.GIF', " ", " ",
'20000709124228');
INSERT INTO demotable VALUES( '384', 'Mechanics', 'Elasticity', 'Coefficient Of
Restitution', 'Dead And Live Balls', '1R40.30', '1', " ", " ", '1R40_30.GIF', " ", " ",
'20000709124228');

```

```
INSERT INTO demotable VALUES( '385', 'Mechanics', 'Elasticity', 'Crystal Structure',  
'Crystal Models', '1R50.20', '1', "", "", '1R50_20.GIF', "", "", '20000709124228');
```

Table: functions

```
# -----  
#  
# Table structure for table 'functions'  
#  
  
CREATE TABLE functions (  
  id int(11) DEFAULT '0' NOT NULL auto_increment,  
  name varchar(100) NOT NULL,  
  function text,  
  uses int(11) DEFAULT '0' NOT NULL,  
  category varchar(50) NOT NULL,  
  PRIMARY KEY (id)  
);  
  
#  
# Dumping data for table 'functions'  
#
```

Table: profiles

```
# -----  
#  
# Table structure for table 'profiles'  
#  
  
CREATE TABLE profiles (  
  id int(11) DEFAULT '0' NOT NULL auto_increment,  
  userid varchar(10) NOT NULL,  
  purpose varchar(15) NOT NULL,  
  room mediumint(9) DEFAULT '0' NOT NULL,  
  timestart time DEFAULT '00:00:00' NOT NULL,  
  timeend time DEFAULT '00:00:00' NOT NULL,  
  PRIMARY KEY (id)  
);  
  
#  
# Dumping data for table 'profiles'  
#  
  
INSERT INTO profiles VALUES( '1', 'corbeau', 'phys026', '214', '10:00:00', '11:50:00');  
INSERT INTO profiles VALUES( '2', 'corbeau', 'phys026', '250', '10:00:00', '11:50:00');
```

Table: receipts

```
# -----  
#  
# Table structure for table 'receipts'  
#  
  
CREATE TABLE receipts (  
  id int(11) DEFAULT '0' NOT NULL auto_increment,  
  receipt text,  
  username varchar(15) NOT NULL,  
  PRIMARY KEY (id),  
  KEY id (id),  
  UNIQUE id_2 (id)  
);  
  
#  
# Dumping data for table 'receipts'  
#  
Withheld. Will be different once reinitialized.
```

Table: session

```
# -----  
#  
# Table structure for table 'session'  
#  
  
CREATE TABLE session (  
  ID varchar(8) NOT NULL,  
  LastAction timestamp(14),  
  auth char(1),  
  username varchar(15),  
  PRIMARY KEY (ID)  
);  
  
#  
# Dumping data for table 'session'  
#  
Withheld. Will be different once reinitialized.
```

Table: todo

```
# -----  
#  
# Table structure for table 'todo'  
#  
  
CREATE TABLE todo (  
  id smallint(6) DEFAULT '0' NOT NULL auto_increment,  
  number varchar(10) NOT NULL,  
  borm char(1) NOT NULL,  
  problem text,  
  date_entered timestamp(14),  
  PRIMARY KEY (id)  
);  
  
#  
# Dumping data for table 'todo'  
#
```

Withheld. Will be different once reinitialized.

Table: transactions

```
# -----  
#  
# Table structure for table 'transactions'  
#  
  
CREATE TABLE transactions (  
  transaction_id int(11) DEFAULT '0' NOT NULL auto_increment,  
  user_id varchar(15) NOT NULL,  
  lab_id int(11) DEFAULT '0' NOT NULL,  
  date_needed timestamp(14),  
  date_return timestamp(14),  
  purpose varchar(12) NOT NULL,  
  delivery char(3),  
  date_order timestamp(14),  
  receipt_id int(11) DEFAULT '0' NOT NULL,  
  PRIMARY KEY (transaction_id),  
  KEY transaction_id (transaction_id),  
  UNIQUE transaction_id_2 (transaction_id)  
);  
  
#  
# Dumping data for table 'transactions'  
#
```

Withheld. Will be different once reinitialized.

Table: users

```
# -----  
#  
# Table structure for table 'users'  
#  
  
CREATE TABLE users (  
  userid varchar(10) NOT NULL,  
  passwd varchar(15) NOT NULL,  
  last_access timestamp(14),  
  fullname varchar(50) NOT NULL,  
  email varchar(50) NOT NULL,  
  PRIMARY KEY (userid)  
);  
  
#  
# Dumping data for table 'users'  
#
```

Withheld. Will be different once reinitialized.

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