

INLS 623 - Assignment 1: Normalization

Date Assigned: Jan. 19 2017

Completion Date: Feb 2, 2017 (11:55 pm)

Software issues:

If you feel there are mistakes in this assignment, check the web page and Sakai for corrections, and report them to us if they have not been made.

Instructions:

1. Put the Student Table (Figure 1) in first normal form and label the primary key(s). You **may** create a new table and add primary key(s) and/or columns to the Students table (Figure 1). a. **Draw the table in first normal form and label the primary key(s).** b. **Explain why the table is not in first normal form.**

ID (PK)	Name	Age	Pet
1	Heather	10	Dog, Rex
2	Alice	10	Cat, Thomas
3	Jimmy	10	Dog, Sally

Figure 1: Student Table

2. Put the Customer Orders (Figure 2) in second normal form. You **may** add column(s), drop column(s), and add primary key(s) to the table(s). You may also **create** new tables as needed. a. **Draw the table(s) in second normal form, label the primary key(s), and**

label the foreign key(s). b. Draw the relationship between the foreign key(s) and primary key(s). c. Explain why the table is not in second normal form.

ID (PK)	Name	Order_ID (PK)	Order_Details	Sale Date
1	Rex	78	Pet Items	1/14/2017
8	Thomas	79	Bath Items	1/10/2017
9	Sally	80	Kitchen Items	1/16/2017

Figure 2: Customer Orders

3. Put the Customer Table (Figure 3) in third normal form. You **may** add column(s), drop column(s), and primary key(s) to table(s). You may also **create** new tables. a. **Draw the table(s) and label the primary keys and foreign keys.** b. **Draw the relationship between the foreign key(s) and primary key(s).** c) **Explain why the table is not in third normal form**

ID (PK)	Name	DOB	Street	City	State	Zip
2	Rex	9/2/1978	123 Main Street	Long Island	VA	24569
2	Thomas	8/2/1995	478 Old Street	Chapel Hill	NC	27516
1	Sally	1/2/2000	513 Young Street	Durham	NC	27703

Figure 3: Customer Table

Getting Help

If you have trouble, please post a question on Piazza before contacting me. Before posing a question, please check if this question has been asked before. This will reduce post clutter and reduce our burden. Repeat questions will be ignored by the instructors.

Piazza allows anyone to respond. So if you see a question that you think you can respond to, please do so, as that will reduce our burden and help you "teach" your fellow students.

Good luck!