INLS 560 - Assignment 5: Character Analysis

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.

Description

You will write a program that opens a given file and counts the number of uppercase letters, lowercase

letters, digits and whitespace characters. This will be done using a loop to process the file and accessing

individual characters within a string.

Requirements

This program requires you to use:

- The file open function to read in text from a file.
- The print function to output the results.
- At least one loop
- Accessing individual characters within a string

Assignment Specification

You will need to prompt the user for the name of a file they would like analyzed. Write a program that
reads the file's contents and determines the following:

- The number of uppercase letters in the file.
- The number of lowercase letters in the file.
- The number of digits in the file.
- The number of whitespace characters in the file (White space characters are blank spaces (" "),
  tab characters ("\t") and new line characters ("\n"))

Read more : http://www.ehow.com/how_12112665_determine-character-whitespace-python.html.

You may test your code using the text.txt file available on the course website. The location of the test file is: http://ils.unc.edu/courses/2014_fall/inls560_001/assignments/test.txt

Be sure to comment your code.

Sample Interactions

Example

```
Enter the name of your file: text.txt
Uppercase count: 29
Lowercase count: 1228
Digit count: 30
Space count: 268
```

Your code does not need to follow this exact script, but all the mentioned functionality should work as shown.

Use the Pycharm Community Edition IDE to develop and execute the code.

Grading

Programs will be graded based on whether they display the correct output, the correct logic, and style.

In this assignment style means, make variable names meaningful. Do not create one letter variable names or variable names that do not have anything to with the assignment. The program must not only print the correct values, but the code must actually perform the correct operations.

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!