

COMP 171

Scripting Language Practicum

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Stringing Along

Overview

Learn to work with strings and lists. Explore different functions that Python has to work with text.

What you need to do

Follow these instructions fully. You will write a program that reads a file, processes each line of the file and print out the results line by line.

1. Inside your script open (for reading) the file `InputFile.txt` provided with the assignment.
2. Read the file one line at a time using a for loop
3. For each line in the file do each of these things to the line
 - a. Print out the length (count of characters) of the line just read on a line by itself
 - b. Reverse the string (make it read the other direction)
 - c. Count how many times “uh” occurs in the string
 - d. Count how many time “hum” occurs in the string
 - e. Print out “There are x uh’s and y hum’s in this line of input”
 - i. Replace x and y with the real numbers
 - f. If there are any uses of “uh” or “hum” in the input, remove them
 - i. Hint, replace them with the empty string “”
 - g. If there are ever two blanks in a row in the line, replace with one blank
 - i. Hint: same as the prior one!
 - h. Center the line within 40 characters
 - i. Print out the result of all this work on a line by itself
4. Once all the lines are processed and printed out, print out another line saying “I’m done!”
5. Write one or two lines at a time and try them out. Don’t try to do this all at once.
6. See the `SimpleString.py` example for functions to use.

7. See the Python documentation from the links in the class web page for more help. Start with the Python Standard Library, 4.6 Sequence Types. String are one example of sequence types.
8. Save your final program as a .py file

How and what to turn in

Turn in your .py file. You must be on time to get points.

Grading

20 points in Assignments for a .py file that runs in Python 3 and has all the necessary items. -5 for each missing item. 0 points if your program has errors at compile or run time.

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