

Programming Exercise 1

Text Statistics

Write a program that reads any text file and prints the statistics shown in the sample execution below, using the Gettysburg Address (user input is in **boldface**):

```
Enter name of text file: gettysburg.txt

Statistics for file: gettysburg.txt:

Characters: 1475
Upper case: 12
Lower case: 1137
Digits: 0
White space: 279
Vowels: {'a': 102, 'e': 165, 'i': 68, 'o': 93, 'u': 21}
Consonants: 700
Sentences: 10
Average words per sentence: 27.8
```

Sentences are any string ending with a period. A “word” is any space-delimited token, including “- -”. Only consider the set {a, e, i, o, u, A, E, I, O, U} as vowels (not y or w). You will find certain functions in the built-in **str** class useful (**isdigit**, **isupper**, etc.). Round the average words-per-sentence to one decimal.

Run your program with the file *yankee.txt* from this assignment’s Canvas folder and submit:

1. Your python code in a file named *textinfo.py*
2. A screenshot of your output

Do not submit anything else.