

CS 101 Homework 3-20-22

- *Save your code as `lastname_homework.py` and submit on Google Classroom.*
- *Please, run your code before submitting.*
- *If you get an error, try to fix it before submitting your homework.*
- *If you get help from anyone, please, make sure that you actually understand the solution.*

Task 1

- Download the “War and Peace” text file from the Google Classroom to the folder of your choice.
- Import `os` module.
- Print your current working directory (folder).
- Change your Python working directory to the folder where you saved “War and Peace”.
- Print your current working directory one more time to verify the above.

Task 2

- Open the book text file in Python, using “with open” approach similar to what we did in class.
- Implement error handling.

Task 3

- Read the whole text file in to `htext` and print the total number of characters in the book.

Task 4

- Create a list of all sentences in the book. Notice that sentences can end not only with “.” but also with “?” and “!”. One simple way to complete this task is to replace all “?” and “!” with “.” before using the `.split(“.”)` method.

Task 5

- Using the original `htext`, remove all punctuation. Also make all words lower case.
- Generate a list of all words from the book’s text similar to how we did it in class.

Task 6

- Print the total number of words in the book.
- Print the total number of sentences in the book.
- Print the average length of a word in the book.
- Print the average length of a sentence in characters and in words.