

Closed Lab 1

Lists and Files

Description: Along with this document, you downloaded two data files: **shakespeare.txt** and **characters.txt**. The former contains, according to Project Gutenberg, the complete works of William Shakespeare in plain text. The latter contains the names of 50 of Shakespeare’s characters, again in plain text. Your mission, should you choose to accept it (no, you don’t really have a choice), is to count the number of times each character is mentioned in the text of the plays.

Almost all of the Python methods you will need are in the examples we have looked at in class. In particular, **open** for opening a file and **readlines** for reading a file into list will be useful. The result of **readlines** will be a list of strings. Recall that you can use **split** to tokenize a string into a list of “words.” However, you can instead apply many list operations to strings as well. Either approach is valid.

Details: Recall that Shakespeare wrote plays. Thus, the **shakespeare.txt** file contains not only what the characters said but also labels indicating which character speaks. The labels are in all caps; you should not count these occurrences of the characters’ names. **characters.txt** contains one character per line.

Your program should produce concise, easy-to-read output that reports the number of occurrences of each character’s name.