

Design a class *Document* with a state (attribute) String *str*. The constructor of this class accept a file name as a passed parameter and then open a text file and read the text on that file onto the String *str*. This class contains set and gets methods in addition to the following methods: **Count**, **LetterOcc**, **WordLength**, and **WordOcc**.

**Count:** Produce the following summary, depending on the passed arguments.

- How many sentence this text has?
- How many word this text has?

**LetterOcc:** Takes a string as an argument and prints a table indicating the number of occurrences of each letter of the alphabet in the text. For example, the sentence **Computer Science Department** contains one “a”, three “b’s”, etc.

**WordLength:** Takes a string as an argument and prints a table indicating the number of one-letter words, two-letter words, three-letter words, etc. appearing in the text.

**WordOcc:** Takes a string as an argument and prints a table indicating the number of occurrences of each different word in the text.

Write a Driver class that creates a *Document* object and access its methods.