

LAB S03 – GREEK TO ME (FILE ANALYSIS)

Access and process information from a text file.

Write a program that reads the information in the file "Phaedo.txt", an excerpt from Plato's famous dialogue. You will create a Driver class with a main method and an Analyzer class with several methods.

Your ultimate goal is to **print out** the following pieces of information in an organized output.

- 1) The number of words in the text file
- 2) The longest word in the text file along with its length
- 3) A table showing the number of words of each length in the text file

Example:

Length	Number of Words
1	9
2	22
3	14
4	12

- 4) Each of the Greek names in the text file. For this project, a Greek name is a word that begins with a capital letter and ends with "ates", "us", or "to".

Required Methods

In the Driver class

main – The main method should create an Analyzer object and call its go method.

In the Analyzer class

go – The go method should access the text file one line at a time.

Recommended Methods

processLine – reads in one line from the text file and processes it word by word

processWord – counts the word, checks its length, and determines if it's Greek

Criteria

- 1) Write pre and post conditions for each method you write for this lab.
- 2) You may not use any existing `String` methods other than the "big seven" presented in class: `length`, `substring`, `indexOf`, `charAt`, `compareTo`, `equals`, `indexOf`

Submission

- 1) Submit your code for this lab on a Googly Doc through Canvas by 11:59 pm on Tuesday, January 21st. Alternatively, you may show your lab to Holm in class before the due date. ***If you submit through Canvas, you MUST provide a sample output.***