

ITLAB-162 IMSc(Life-Sci, HealthPsy, Optometry)
and IMA Economics
Practice Questions 3 May 2023

1. Compare the stories of two writers (classical and modern) by plotting the frequency of words of different length (in the range 4 to 10). (Texts of roughly the same length of Edgar Allan Poe and J.K.Rowling are given). (The texts are taken from gutenber.org and bookbrowse.com respectively).
 - (a) First ensure to remove all the special characters and numbers from the text.
 - (b) Write a function `display_words(k)` in python to read lines from the text file and display those words having k characters.
 - (c) Write a function `word_freq(<length>)` which takes length as the input argument and gives the number of words of that length as output.
 - (d) Plot the information for the two writers and visually compare the two frequency plots.
2. Find the average length of a sentence (as the number of words contained in them) in the document. Print the average lengths of a sentence of the two texts and print as output: "The average length of a sentence of the story of Edgar Allan Poe is": and similarly of J.K.Rowling.
3. Understand the usage of 'break' and 'continue' in a Python program. Solve a problem that uses these two statements.