

Data Management and Artificial Intelligence Homework 2

Task 1 *Reading files – Faust and Jane Eyre*

Write a Python program that counts the number of occurrence of each letter (both capital and lowercase letters) in Faust and Jane Eyre, respectively. Is the distribution of letter occurrences similar in the two books? Which letter appears the most often? Which is the least? The text files of these two books are given in the folder DMAI_HW2_data.

Task 2 *Writing files – Store the result*

Store the results you get in task 1 to two files Faust_result.txt and Jane_Eyre_result.txt. An exemplary out text file is:

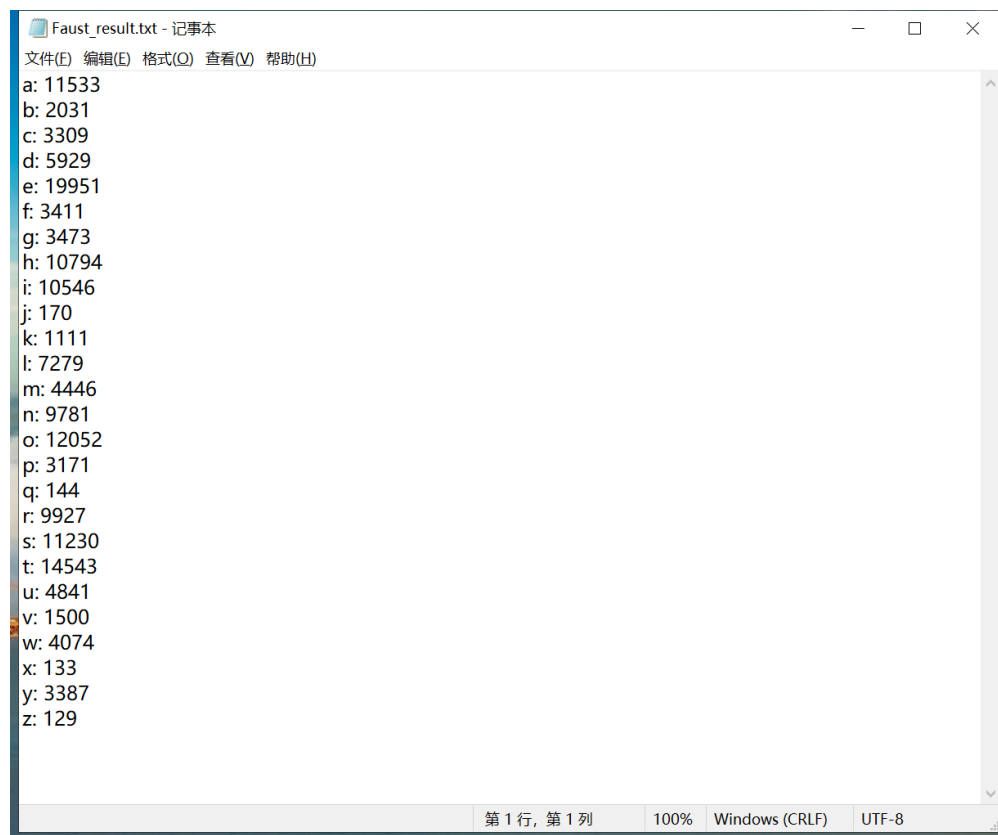


Figure 2: Graph of Task 2

Task 3 *Dealing with a csv file – Compute the average score*

CSV is a general-purpose, relatively simple file format that is widely used by users, businesses, and science. The most widespread use is to transfer tabular data between programs. In this task, you need to open and deal with a toy csv file “toy.csv”, which is also given in the folder DMAI_HW2_data. There is some information (names, ages and scores) of four students in the file. Please implement a function AverageScore() which outputs the average scores of all students in the file.

Hint: The python String split() method may help you to deal with csv files. Check “<https://www.runoob.com/python/att-string-split.html>” for more details about the split() method.