Count Popular Characters

ICT1002 Programming Fundamentals

In this task, you are going to design one program to check the popular characters in a given string. You need to write one program to calculate the top 5 most frequent characters. The following are some hints that may help you design this program.

- String has a cool function that you can use to return a copy of the string in which all case-based characters have been lowercased.
- To get the top 5 most frequent characters after sorting them, you need to extract all the characters first and figure out one way to calculate the frequency of each character. Then select the top 5 characters.
- The output must in the descending order of character frequency. If there are characters with the same frequency, they have to be printed in ascending ASCII order.

Example:

C:\\ICT1002\Lab2\CountPopularChars>python CountPopularChars.py sdsERwweYxcxeewHJesddsdskjjkjrFGe21DS2145o9003gDDS

Output: Print out the top 5 characters and their counts in the screen. (Your output should be in one line)

d:7,s:7,e:6,j:4,w:3

NOTE: For all the above tasks, please test your program using different input and make sure to document your code properly. Even though the functions will only be introduced next week, you are welcome to use functions to write the program if you know how to use them.