

**51) . Sort Characters By Frequency** Given a string *s*, sort it in decreasing order based on the frequency of the characters. The frequency of a character is the number of times it appears in the string. Return the sorted string. If there are multiple answers, return any of them

**CODE:**

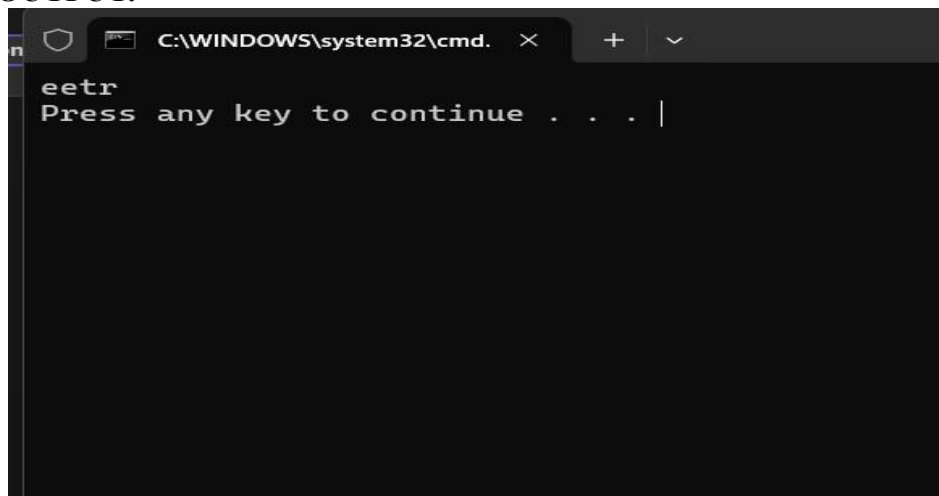
```
from collections import Counter
def frequency_sort(s):
    freq = Counter(s)

    sorted_chars = sorted(freq.items(), key=lambda item: item[1], reverse=True)

    result = ''.join(char * count for char, count in sorted_chars)

    return result
s = "tree"
print(frequency_sort(s))
```

**OUTPUT:**

A screenshot of a Windows Command Prompt window. The title bar shows the path 'C:\WINDOWS\system32\cmd.' and standard window controls. The command prompt displays the output of the program: 'eetr' on the first line and 'Press any key to continue . . . |' on the second line, with a vertical cursor at the end of the second line.

TIME COMPLEXITY :  $O(n+k\log k)$