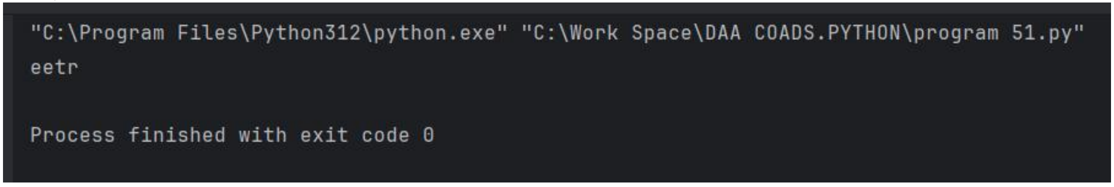
51. sort Characters By Frequency Given a string s, sort it in decreasing order based on the frequency of the characters. The frequency of a character is the number of times it appears in the string. Return the sorted string. If there are multiple answers, return any of them. Example 1: Input: s = "tree" Output: "eert"

Program:

```
from collections import Counter

def frequency_sort(s: str) -> str:
    # Step 1: Count frequencies
    freq = Counter(s)

    # Step 2: Sort characters by frequency in descending order
    sorted_chars = sorted(freq, key=lambda x: -freq[x])

    # Step 3: Build the result string
    result = ''.join([char * freq[char] for char in sorted_chars])

    return result

# Example usage:
s = "tree"
print(frequency_sort(s))  # Output could be "eert" or "eetr"
```

Output:



```
"C:\Program Files\Python312\python.exe" "C:\Work Space\DAA COADS.PYTHON\program 51.py"
eetr

Process finished with exit code 0
```

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