Assignment

June 6, 2023

[1]:
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# Python Section
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# Question 1
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[9]:
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def highest_frequency_word(input_string):

    words = input_string.split()


    word_frequency = {}
    for word in words:
        word_frequency[word] = word_frequency.get(word, 0) + 1


    highest_frequency = max(word_frequency.values())


    highest_frequency_word = next(word for word, frequency in word_frequency.
↪items() if frequency == highest_frequency)
    highest_frequency_word_length = len(highest_frequency_word)

    return highest_frequency_word_length
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[10]:
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input_string = "write write write all the number from from from 1 to 100"
highest_frequency_word(input_string)
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[10]:
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# Question 2
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[12]:
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def is_valid_string(s):

    char_frequency = {}
    for char in s:
        char_frequency[char] = char_frequency.get(char, 0) + 1

    # Find the most common frequency
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    frequencies = list(char_frequency.values())
    max_frequency = max(frequencies)
    min_frequency = min(frequencies)

    # If all characters have the same frequency, the string is valid
    if max_frequency == min_frequency:
        return "YES"

    # If there are exactly two different frequencies and the difference is 1,
    # check if removing one character can make all characters have the same␣
↪frequency
    if frequencies.count(max_frequency) == 1 and max_frequency - min_frequency␣
↪== 1:
        return "YES"

    # Otherwise, the string is not valid
    return "NO"
```

[13]:
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print(is_valid_string("abc"))  # Output: YES
print(is_valid_string("abcc"))  # Output: NO
```

```
YES
YES
```

[ ]: