Strings

String

Question 1: Reverse a String

Write a function that takes a string as input and returns the reversed version of that string.

For example, if the input is "hello", the function should return "olleh".

Question 2: Count Vowels

Write a function that takes a string as input and returns the number of vowels (a, e, i, o, u) present in the string. Ignore case, so both uppercase and lowercase vowels should be counted.

For example, if the input is "Hello World", the function should return 3.

Question 3: Check Palindrome

Write a function that takes a string as input and returns true if it is a palindrome, and false otherwise. A palindrome is a word, phrase, number, or other sequence of characters that reads the same backward as forward. Ignore spaces and punctuation when checking for palindromes.

For example, if the input is "racecar", the function should return true.

String Function

Question 1: Find the Longest Word

Write a function that takes a sentence (string) as input and returns the longest word in the sentence. If there are multiple words with the same length, return the first occurrence. Ignore punctuation and consider any sequence of characters separated by spaces as a word.

For example, if the input is "The quick brown fox jumps over the lazy dog", the function should return "jumps".

Question 2: Title Case a Sentence

Write a function that takes a sentence (string) as input and returns the sentence with the first letter of each word capitalized, while the rest of the word is in lowercase. You can assume that words are separated by spaces, and there will be no punctuation in the input.

For example, if the input is "hello world", the function should return "Hello World".

Question 3: Count Character Occurrences

Write a function that takes a string and a character as input and returns the number of occurrences of that character in the string.

For example, if the input string is "abracadabra" and the character is "a", the function should return 5.