

JavaScript Practice Question

Reverse a String: Write a function `reverseString(str)` that takes a string and returns the string in reverse order.

- **Example:** `reverseString("JavaScript")` should return `"tpircSavaJ"`.

Check for Palindrome: Write a function `isPalindrome(str)` that checks if a given string is a palindrome (a string that reads the same backward as forward).

- **Example:** `isPalindrome("racecar")` should return `true`.

Count Vowels: Write a function `countVowels(str)` that counts the number of vowels (a, e, i, o, u) in a given string.

- **Example:** `countVowels("hello world")` should return `3`.

Find the Longest Word: Write a function `longestWord(str)` that finds the longest word in a given sentence.

- **Example:** `longestWord("The quick brown fox jumped over the lazy dog")` should return `"jumped"`.

Replace Characters: Write a function `replaceChar(str, target, replacement)` that replaces all occurrences of a target character in a string with a replacement character.

- **Example:** `replaceChar("hello world", "o", "0")` should return `"hell0 w0rld"`.

Character Frequency: Write a function `charFrequency(str)` that counts the frequency of each character in a string and returns it as an object.

- **Example:** `charFrequency("mississippi")` should return `{ m: 1, i: 4, s: 4, p: 2 }`.

Capitalize First Letter: Write a function `capitalizeWords(str)` that capitalizes the first letter of each word in a string.

- **Example:** `capitalizeWords("hello world")` should return `"Hello World"`.

Remove Whitespace: Write a function `trimString(str)` that removes leading and trailing whitespace from a string.

- **Example:** `trimString(" hello world ")` should return `"hello world"`.

Find Substring Occurrences: Write a function `countSubstring(str, substring)` that counts the number of times a given substring appears in a string.

- **Example:** `countSubstring("hello hello hello", "hello")` should return 3.

Remove Duplicate Characters: Write a function `removeDuplicates(str)` that removes duplicate characters from a string.

- **Example:** `removeDuplicates("aabbccddeeff")` should return "abcdef".