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JS ReverseString.js > ...
1
2 //Home Assignment: Strings in JS
3 //Create a JavaScript function that accepts a string, reverses it, and checks if the reversed string is a
4 //palindrome, then test your function with various strings and print the results
5
6 function isPalindrome(str) {
7     let reversed = str.split("").reverse().join("");
8     console.log("Reversed:", reversed);
9
10    if (str === reversed) {
11        console.log("It is a palindrome.");
12    } else {
13        console.log("It is not a palindrome.");
14    }
15 }
16
17 // Test with input = "madam"
18 isPalindrome("madam");
19 isPalindrome("playwright");
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS powershell

```
PS C:\Playwright-workspace\Playwright-Testleaf\HomeAssignmentWeek2> node ReverseString.js
Reversed: madam
It is a palindrome.
Reversed: thgirwyalp
It is not a palindrome.
PS C:\Playwright-workspace\Playwright-Testleaf\HomeAssignmentWeek2> 
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```
JS JavaScriptFunctions.js > userProfile
1 //Home Assignment: JavaScript Functions
2 //Task 1: Function Declaration
3 function userProfile(name)
4 {console.log(`Hello, ${name}!`);}
5 userProfile("Aradhita");
6 //Task 2: Arrow Function
7 const double = (num) => num * 2;
8 console.log("Double of 5:", double(5));
9 //Task 3: Anonymous Function
10 setTimeout(function()
11 {console.log("This message is delayed by 2 seconds");}, 2000);
12 //Task 4: Callback Function
13 function getUserData(callback)
14 {
15     setTimeout(() => {
16         const user =
17         {
18             name: "Arshi",
19             age: 24
20         };
21         callback(user);
22     }, 3000);}
23 // Call getUserData and log name & age
24 getUserData(function(user) {
25     console.log(`User Name: ${user.name}`);
26     console.log(`User Age: ${user.age}`);
27 });
28
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Playwright-workspace\Playwright-Testleaf\HomeAssignmentWeek2> node JavaScriptFunctions.js
Hello, Aradhita!
Double of 5: 10
This message is delayed by 2 seconds
User Name: Arshi
User Age: 24
PS C:\Playwright-workspace\Playwright-Testleaf\HomeAssignmentWeek2> 
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JS String.js > lengthOfLastWord
1 //Given a string s consisting of words and spaces, return the length of the last word in the string.
2 //Example 1:Input: s = "Hello World"
3 function lengthOfLastWord(input) {
4     input = input.trim(); // Remove leading/trailing spaces-> "Hello World" -> "Hello World"
5     let words = input.split(" "); // Split into words-> ["Hello", "World"]
6     let lastWord = words[words.length - 1]; // Get the last word -> "World"
7     let length = lastWord.length; // Get its length->indexes start at 0, but length is just a total count, starting from 1
8     return { word: lastWord, length: length }; // Return both as an object->word: "World", length: 5
9 }
10 let result1 = lengthOfLastWord("Hello World");
11 console.log(`The last word is "${result1.word}" with length ${result1.length}`); //world-5
12 let result2 = lengthOfLastWord("fly me to the moon");
13 console.log(`The last word is "${result2.word}" with length ${result2.length}`); //moon-4
14
15 //Write a function to check if two strings are anagrams
16 function isAnagram(str1, str2) {
17     // Step 1: Remove spaces and convert to lowercase
18     let s1 = str1.split(" ").join("").toLowerCase(); // "silent"
19     let s2 = str2.split(" ").join("").toLowerCase(); // "listen"
20     // Step 2: Sort the characters
21     let sorted1 = s1.split('').sort().join(''); // ["s", "i", "l", "e", "n", "t"] -> ["e", "i", "l", "n", "s", "t"] -> "eilnst"
22     let sorted2 = s2.split('').sort().join(''); // ["l", "i", "s", "t", "e", "n"] -> ["e", "i", "l", "n", "s", "t"] -> "eilnst"
23     // Step 3: Compare sorted strings
24     return sorted1 === sorted2;
25 } console.log(isAnagram("silent", "listen")); //true
26 console.log(isAnagram("hello", "world")); //false
27
28

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

 powershell

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Node.js v22.16.0
PS C:\Playwright-workspace\Playwright-Testleaf\HomeAssignmentWeek2> node String.js
The last word is "World" with length 5
The last word is "moon" with length 4
true
false

```