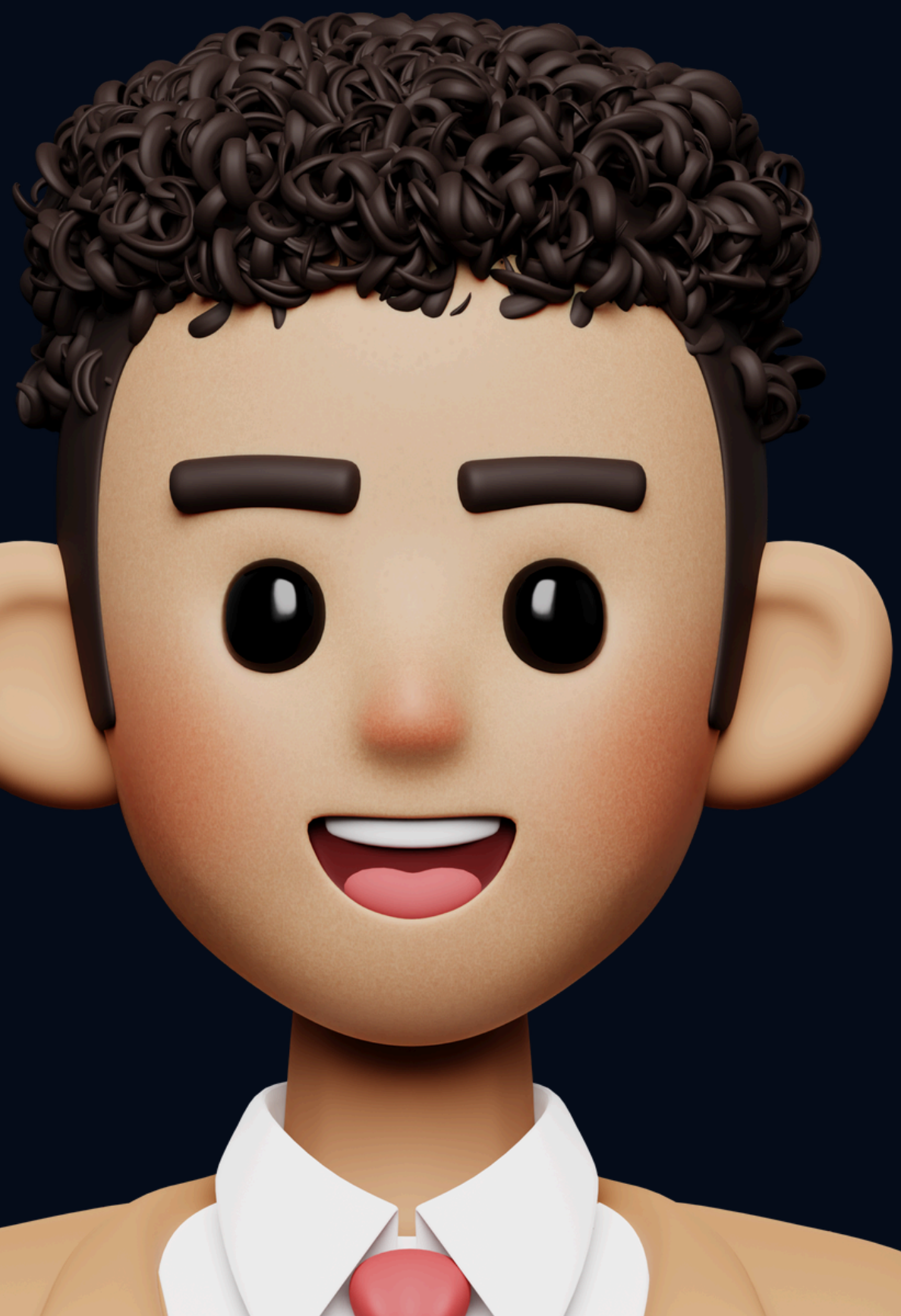
Coding Questions

STRING



1. Write a function to **reverse** a given string

```
function reverseString(str) {
    return str.split('').reverse().join('');
}

console.log(reverseString("hello")); // Output: "olleh"
```

2. Write a function to check if a String is a **Palindrome**

```
function isPalindrome(str) {
    const reversed = str.split('').reverse().join('');
    return str === reversed;
}

// Example usage:
console.log(isPalindrome("racecar")); // Output: true
console.log(isPalindrome("hello"));   // Output: false
```

3. Count the Number of **Vowels** in a String

```
function countVowels(str) {
    const vowels = 'aeiouAEIOU';
    let count = 0;
    for (let char of str) {
        if (vowels.includes(char)) {
            count++;
        }
    }
    return count;
}

console.log(countVowels("hello world")); // Output: 3
```

4. Find the **Longest Word** in a String

```
function findLongestWord(str) {
    const words = str.split(' ');
    let longest = 0;
    for (let word of words) {
        if (word.length > longest) {
            longest = word.length;
        }
    }
    return longest;
}

console.log(findLongestWord("The quick brown fox jumps over the lazy dog")); // Output: 5
```

5. **Capitalize** the First Letter of Each Word

```
function capitalizeFirstLetter(str) {
    return str.split(' ').map(word =>
word.charAt(0).toUpperCase() + word.slice(1)).join('
');
}

console.log(capitalizeFirstLetter("hello world")); //
Output: "Hello World"
```

6. **Repeat** a String a Given Number of Times

```
function repeatString(str, num) {
    if (num < 0) return '';
    return str.repeat(num);
}

console.log(repeatString("abc", 3)); // Output:
"abcabcabc"
```

7. Remove **Duplicate** Characters from a String

```
function removeDuplicates(str) {
    return [...new Set(str)].join('');
}

console.log(removeDuplicates("aabbcc"));
// Output: "abc"
```

FOLLOW