

problem statement

Longest Palindromic Substring Write a program to find the longest palindromic substring in a given string without using any built-in substring or reverse functions. For example, for input "babad", the output should be "bab" or "aba".

Code

```
function findLongestPalindrome(inputStr: string): string {  
    let maxPalindromeLen = 0;  
    let palindromeStart = 0;  
  
    const findPalindrome = (str: string, leftIdx: number, rightIdx: number): void => {  
        while (leftIdx >= 0 && rightIdx < str.length && str[leftIdx] === str[rightIdx]) {  
            leftIdx--;  
            rightIdx++;  
        }  
  
        const currPalindromeLen = rightIdx - leftIdx - 1;  
        if (currPalindromeLen > maxPalindromeLen) {  
            maxPalindromeLen = currPalindromeLen;  
            palindromeStart = leftIdx + 1;  
        }  
    };  
  
    for (let i = 0; i < inputStr.length; i++) {  
  
        findPalindrome(inputStr, i, i);  
        // Check for even-length palindromes  
        findPalindrome(inputStr, i, i + 1);  
    }  
  
    let longestPalindrome = "";  
    for (let i = palindromeStart; i < palindromeStart + maxPalindromeLen; i++) {  
        longestPalindrome += inputStr[i];  
    }  
}
```

```
}  
  
    return longestPalindrome;  
}  
  
const testStr = "babad";  
console.log(findLongestPalindrome(testStr));
```

Output was "bab"

Sample Test Cases

Testcase 1

"abaxyzzyxf" -> "xyzyx"

Testcase 2

"abccbadad" -> "abccba"

Testcase 3

"xyzabcba" -> "abcba"