

### JS Experiment 3

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```
<!DOCTYPE html>
<html>
<head>
    <title>String Operations Using JavaScript</title>
    <script>
        // Function to reverse a string
        function reverseString(str) {
            return str.split("").reverse().join("");
        }

        // Function to replace characters in a string
        function replaceCharacter(str, searchChar, newChar) {
            // Replace all occurrences
            return str.split(searchChar).join(newChar);
        }

        // Function to check if the string is a palindrome
        function isPalindrome(str) {
            // Remove non-alphanumeric chars and convert to lower case
            var cleaned = str.replace(/[^A-Za-z0-9]/g, "").toLowerCase();
            return cleaned === cleaned.split("").reverse().join("");
        }

        // Main function to display operations
        function performOperations() {
            var inputStr = document.getElementById("inputStr").value;
            var searchChar = document.getElementById("searchChar").value;
            var newChar = document.getElementById("newChar").value;

            // Reverse
            var reversed = reverseString(inputStr);

            // Replace
            var replaced = replaceCharacter(inputStr, searchChar, newChar);

            // Palindrome check
            var palindrome = isPalindrome(inputStr) ? "Yes" : "No";

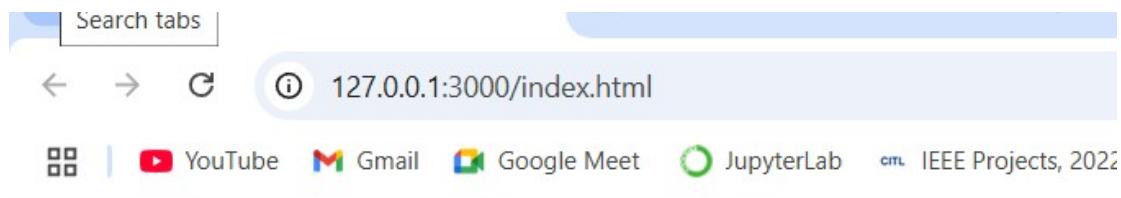
            // Output
            document.getElementById("result").innerHTML =
                "<b>Original String:</b> " + inputStr + "<br>" +
                "<b>Reversed String:</b> " + reversed + "<br>" +

```

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        "<b>String after replacement:</b> " + replaced + "<br>" +
        "<b>Is Palindrome?</b> " + palindrome;
    }
</script>
</head>
<body>
    <h2>JavaScript String Operations</h2>
    <label>Enter a string: </label><input type="text" id="inputStr"><br><br>
    <label>Character to Replace: </label><input type="text" id="searchChar"
maxlength="1"><br><br>
    <label>New Character: </label><input type="text" id="newChar"
maxlength="1"><br><br>
    <button onclick="performOperations()">Perform Operations</button>
    <hr>
    <div id="result"></div>
</body>
</html>

```



## JavaScript String Operations

Enter a string:

Character to Replace:

New Character:

**Original String:** Level

**Reversed String:** level

**String after replacement:** Livil

**Is Palindrome?** Yes