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Practical No: 4 Write a JavaScript program to compare two strings using various methods.

Code:

**Index.html**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>String Comparison</title>

</head>

<body>

    <h1>String Comparison</h1>

    <label for="string1">String 1:</label>

    <input type="text" id="string1" placeholder="Enter first string">

    <br>

    <label for="string2">String 2:</label>

    <input type="text" id="string2" placeholder="Enter second string">

    <br>

    <button id="compareButton">Compare</button>

    <p id="result"></p>

    <script src="script.js"></script>

</body>

</html>

**Script.js**

const string1Input = document.getElementById("string1");

const string2Input = document.getElementById("string2");

const compareButton = document.getElementById("compareButton");

const resultDisplay = document.getElementById("result");

compareButton.addEventListener("click", compareStrings);

function compareStrings() {

    const string1 = string1Input.value;

    const string2 = string2Input.value;

    const localeCompareResult = string1.localeCompare(string2) === 0;

    const strictEqualityResult = string1 === string2;

    const regexComparison = compareWithRegex(string1, string2);

    const lengthComparison = string1.length === string2.length;

    const lowercaseComparison = string1.toLowerCase() === string2.toLowerCase();

    resultDisplay.innerHTML = `

        <p>Comparison using localeCompare: ${localeCompareResult}</p>

        <p>Comparison using strict equality (===): ${strictEqualityResult}</p>

        <p>Comparison using regex: ${regexComparison}</p>

        <p>Comparison based on length: ${lengthComparison}</p>

        <p>Comparison after converting to lowercase: ${lowercaseComparison}</p>

    `;

}

function compareWithRegex(str1, str2) {

    const regex = new RegExp(`^${str1}$`, 'i');

    return regex.test(str2);

}

Output:

