

```

1  // ***** Homework 6 Pt II script *****
2  // Function to count occurrences of a character from user input.
3  function countCharacter() {
4      // Retrieve the text content from the textarea.
5      var content = document.getElementById("textContent").value;
6
7      // Retrieve the single character input by the user.
8      var char = document.getElementById("charInput").value;
9
10     // Get the div element where results or messages will be displayed.
11     var resultDiv = document.getElementById("result");
12
13     // Get the error message element where error messages will be displayed
14     var errorMessageDiv = document.getElementById("errorMessage");
15
16     // Initialize a counter for the number of occurrences.
17     var charCount = 0;
18
19     // Check if the user has entered exactly one character.
20     if (!char || char.length !== 1) {
21         errorMessageDiv.textContent = "Please enter a single character."; // Display
22         error message
23         return; // Exit the function
24     } else {
25         errorMessageDiv.textContent = ''; // Clear error message if input is valid
26     }
27
28     // Iterate over each character in the content.
29     for (var i = 0; i < content.length; i++) {
30         // Convert both content character and input character to lower case and compare.
31         // This makes the search case-insensitive.
32         if (content[i].toLowerCase() === char.toLowerCase()) {
33             charCount++; // Increment the count if a match is found.
34         }
35     }
36
37     // Condition to display information on text area or if character not found to open
38     // window to explain.
39     if (charCount > 0) {
40         // If the character was found, display the count in the resultDiv.
41         resultDiv.innerHTML = `The character "${char}" appears ${charCount} times in the
42         text.`;
43     } else {
44         // If the character was not found, clear the resultDiv.
45         resultDiv.innerHTML = "";
46
47         // Open a new small window to show a message that the character was not found.
48         var newWindow = window.open("", "MsgWindow", "width=300,height=100");
49         // Write the message in the new window, including a close button.
50         newWindow.document.write(`<p>Search character "${char}" not found in the content
51         you typed.</p><button onclick="window.close()">Close</button>`);
52     }
53 }

```