

# WEB TECHNOLOGY LAB 5

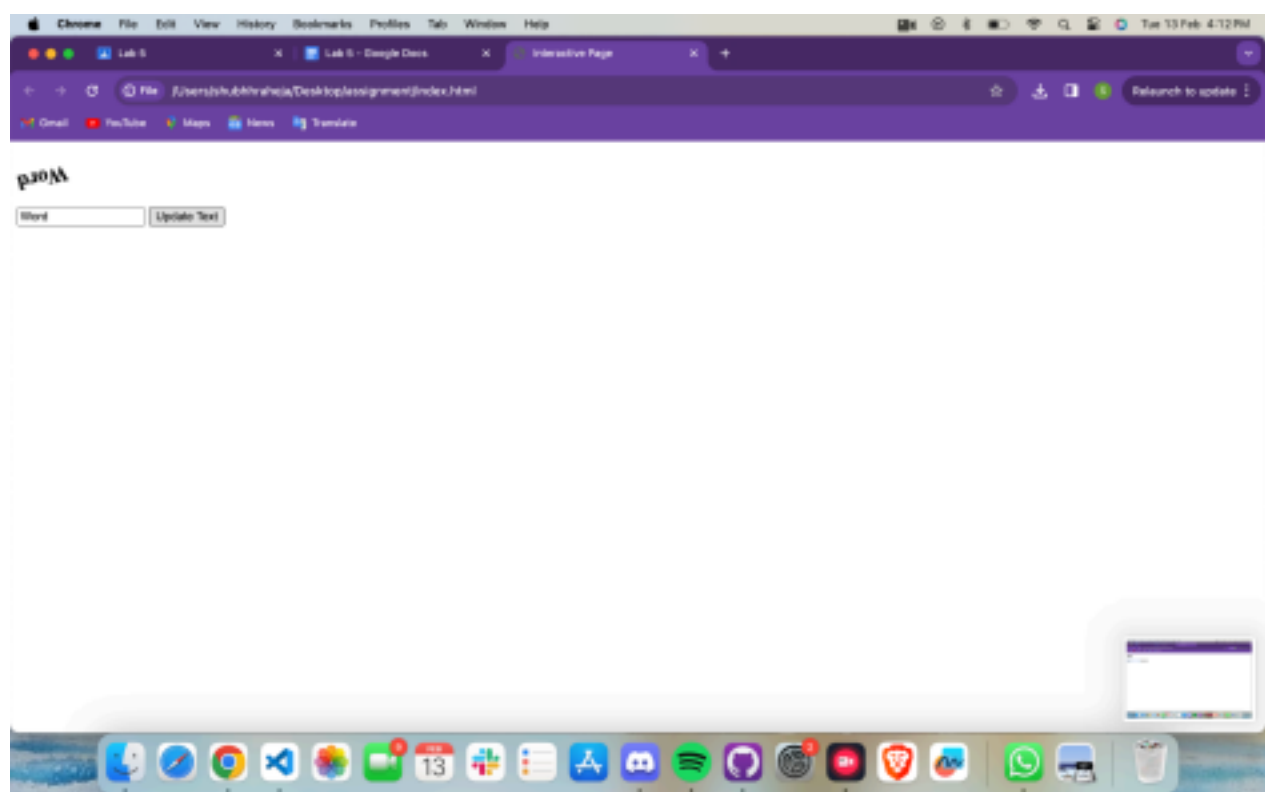
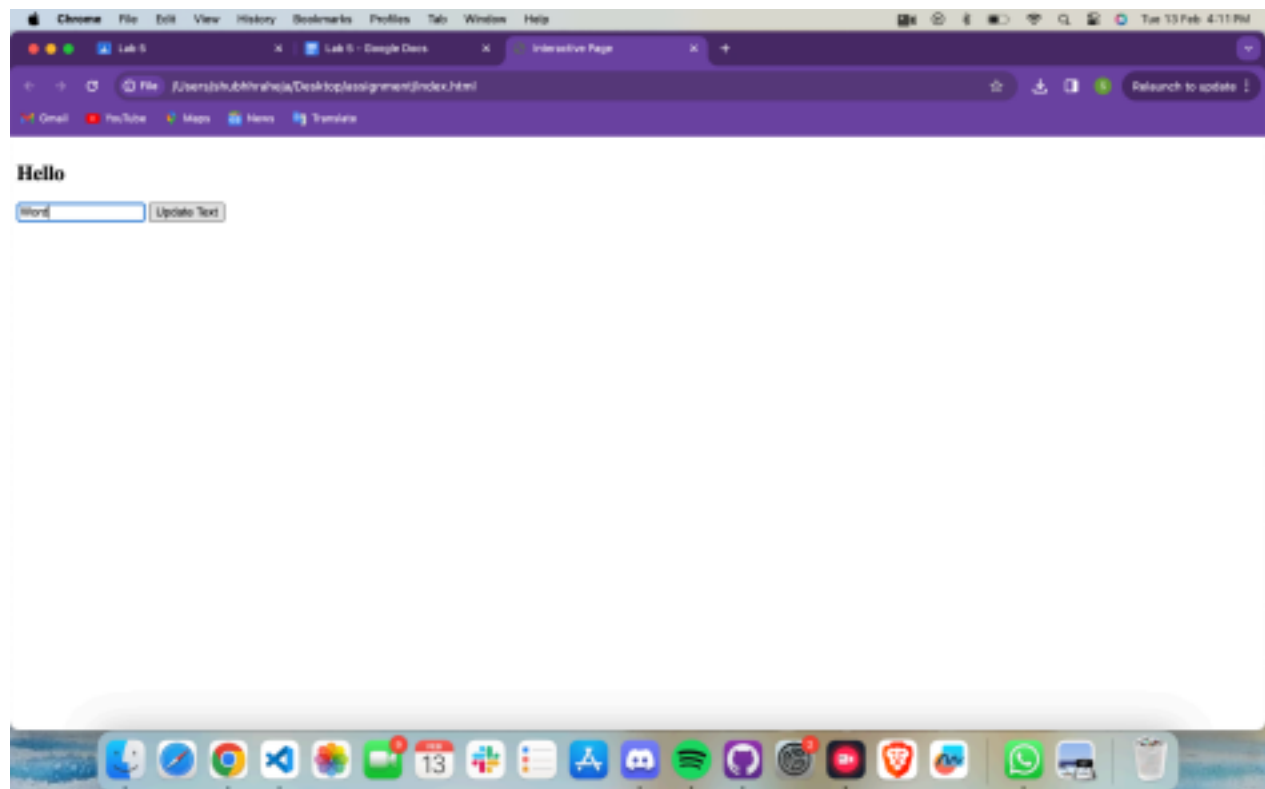
## SHUBH RAHEJA

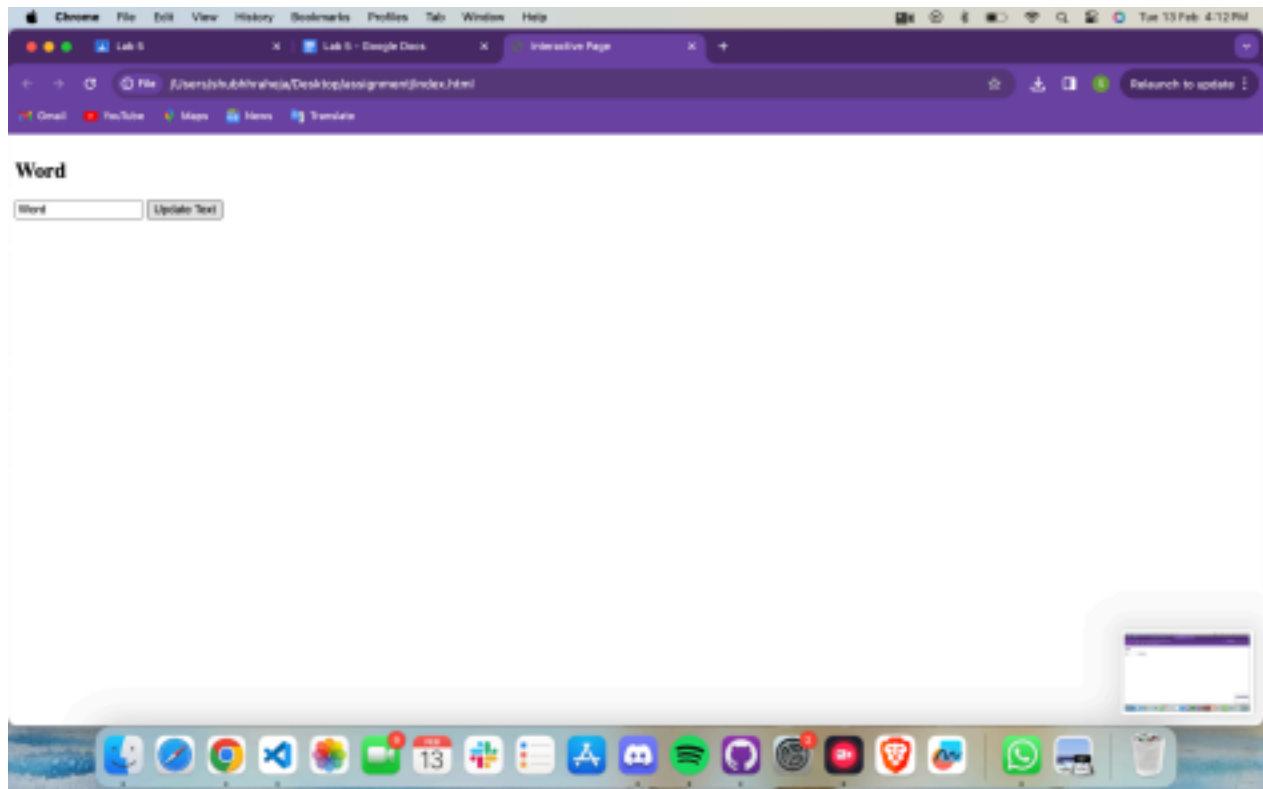
### 22cs2031

Date: 13<sup>th</sup> February 2024

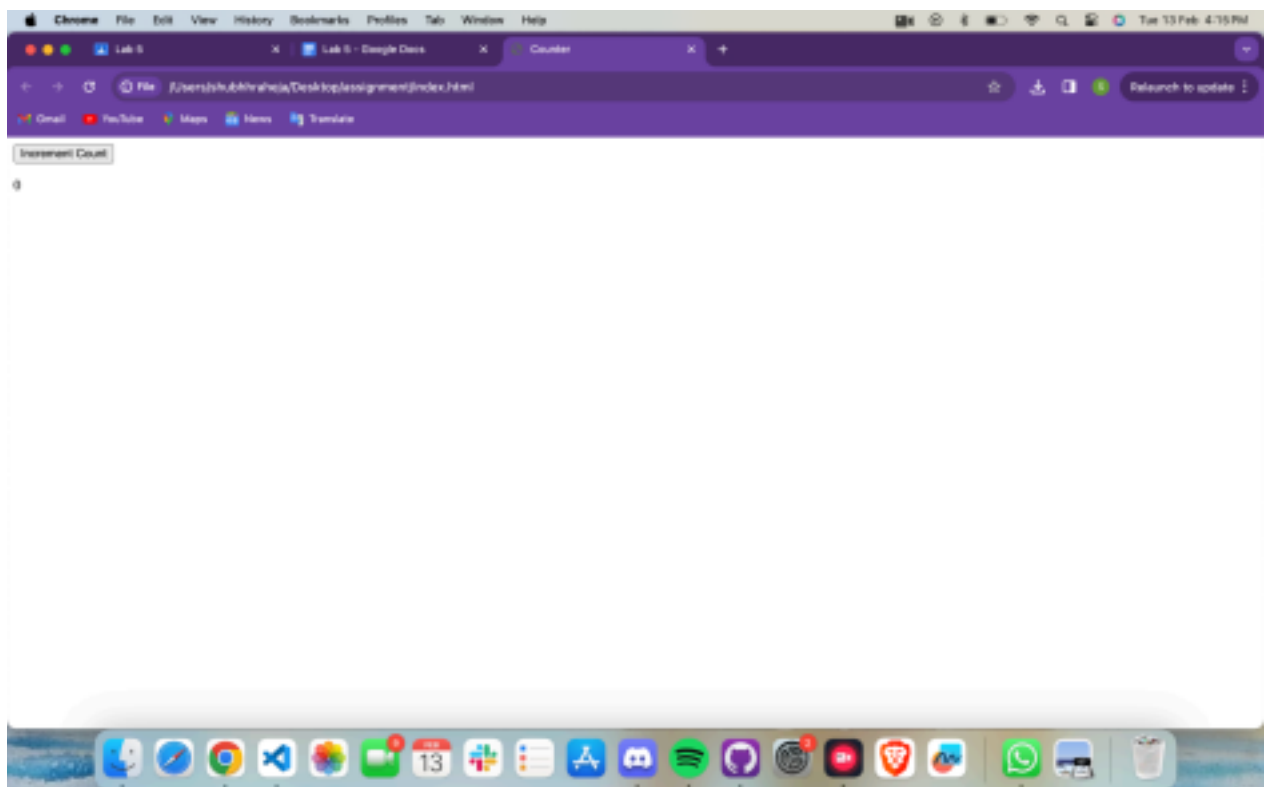
T1. Make a simple web page that contains an h2 with the word "Hello" a text input box, and a button. When the user types a word or phrase into the input box and presses the button, replace the old h2 with the word entered. Using animation, make the word spin.

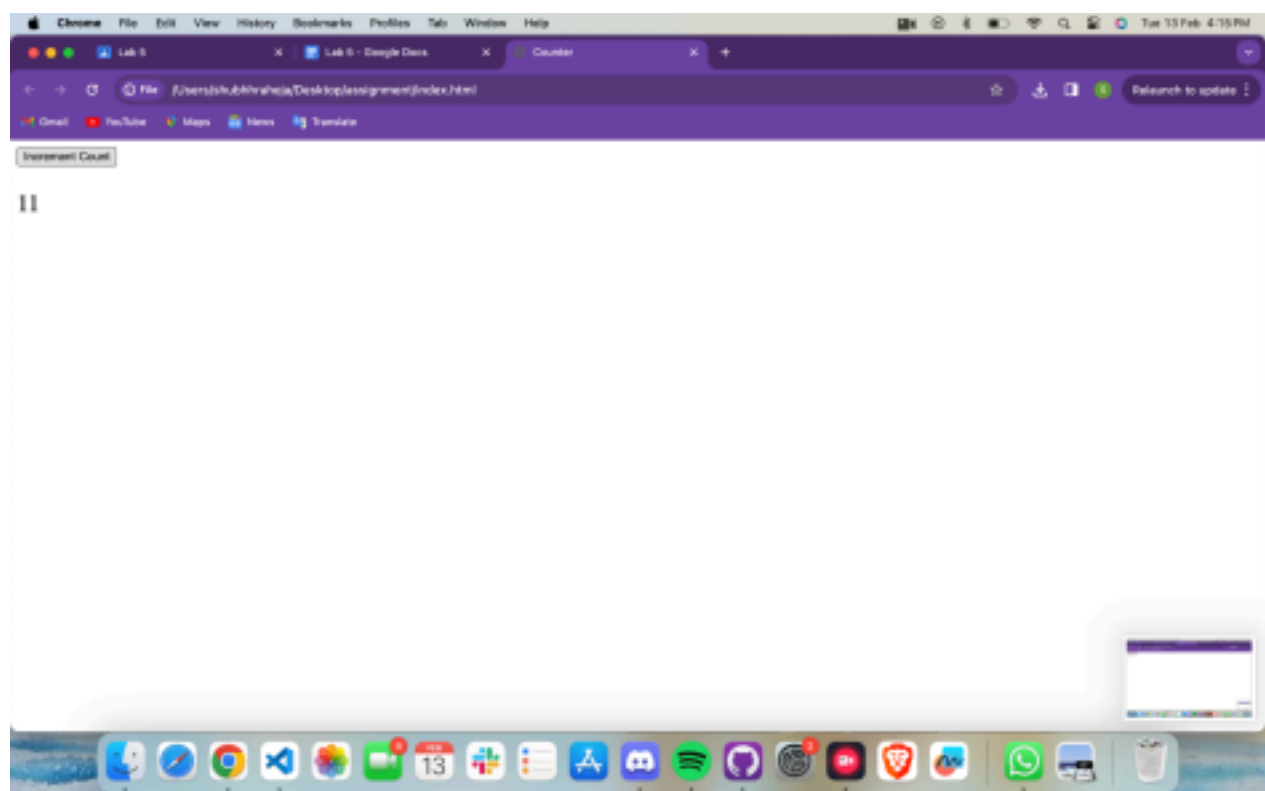
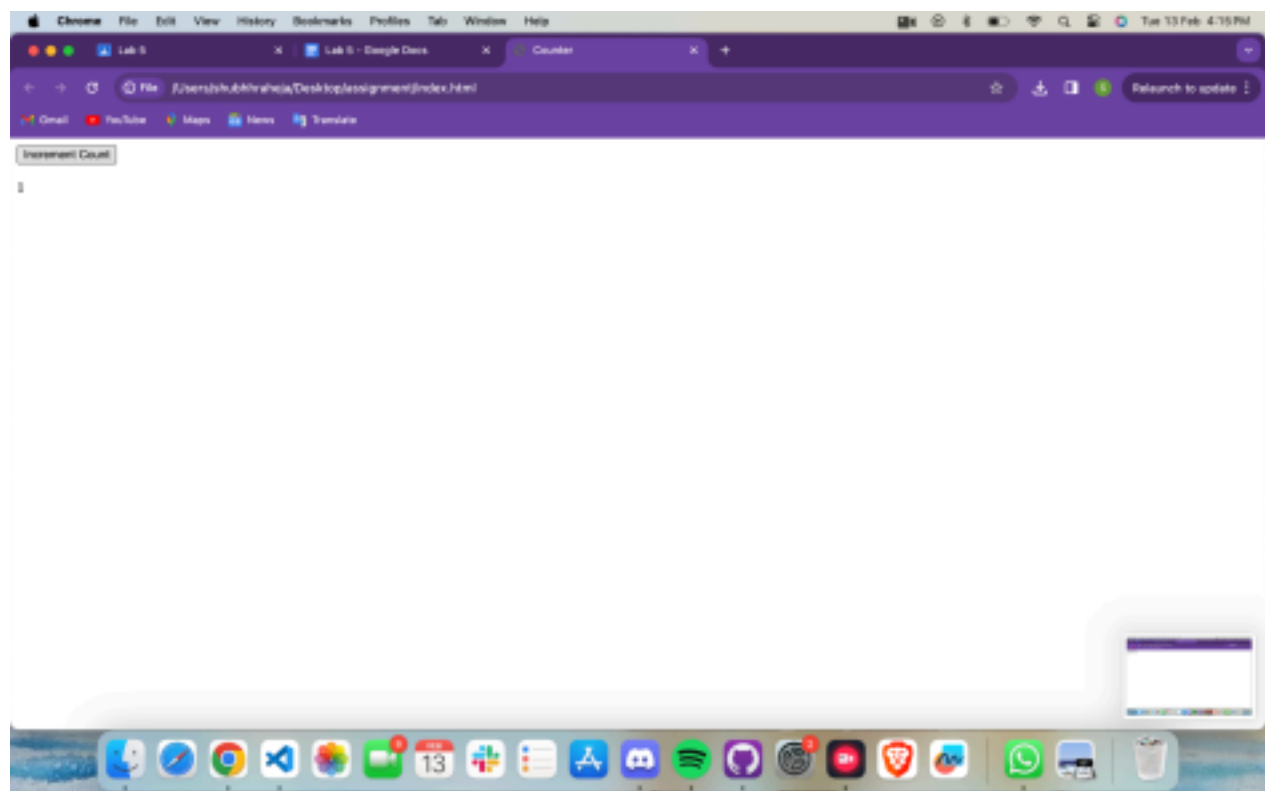
```
1 </DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <title>Interactive Page</title>
6   <style>
7     /* CSS goes here */
8     @keyframes spin {
9       from { transform: rotate(0deg); }
10      to { transform: rotate(360deg); }
11    }
12
13    h2 {
14      display: inline-block;
15      animation: spin 2s linear;
16    }
17  </style>
18 </head>
19 <body>
20   <h2 id="displayText">Hello</h2><br>
21   <input type="text" id="inputText">
22   <button onclick="updateText()">Update Text</button>
23
24   <script>
25     // JavaScript goes here
26     Codeium: Refactor | Explain | X
27     function updateText() {
28       var input = document.getElementById("inputText").value;
29       var display = document.getElementById("displayText");
30       display.textContent = input;
31       // Restart animation
32       display.style.animation = 'none';
33       display.offsetHeight; /* trigger reflow */
34       display.style.animation = null;
35     }
36   </script>
37 </body>
38 </html>
```

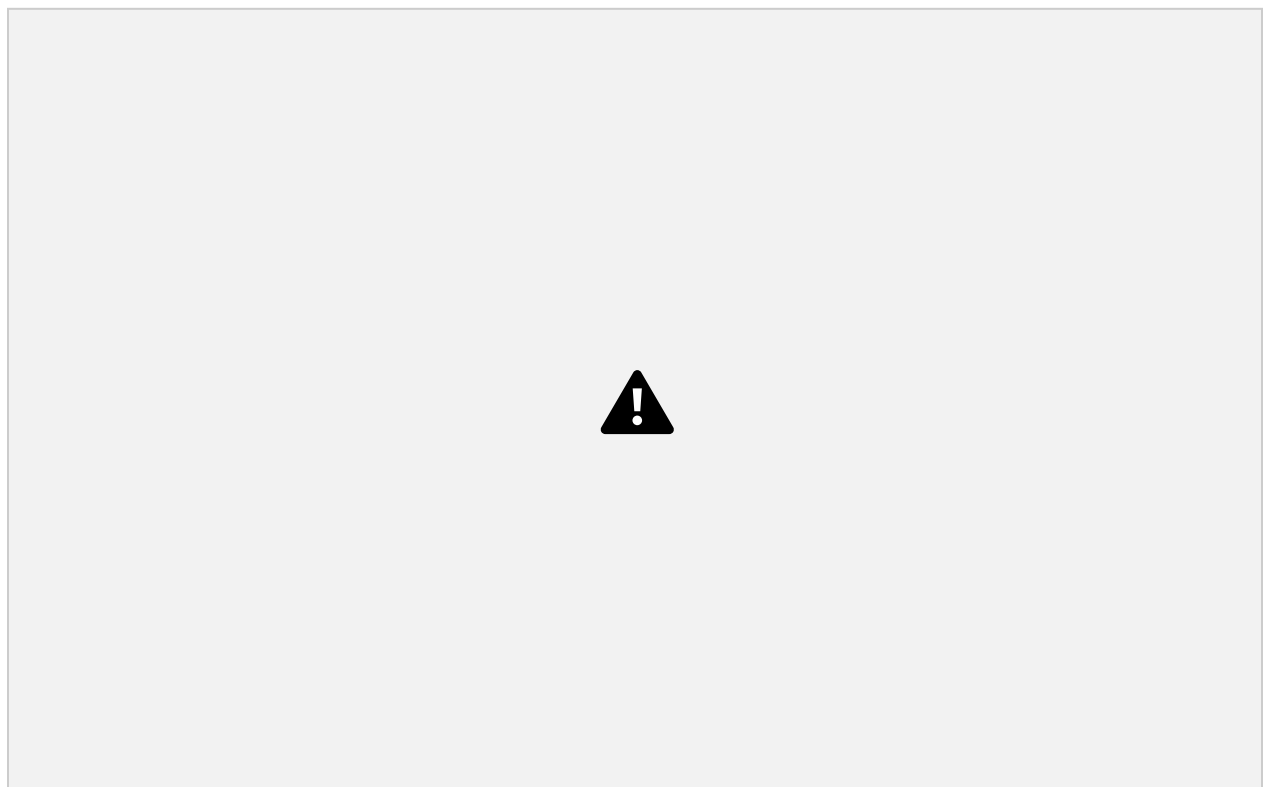
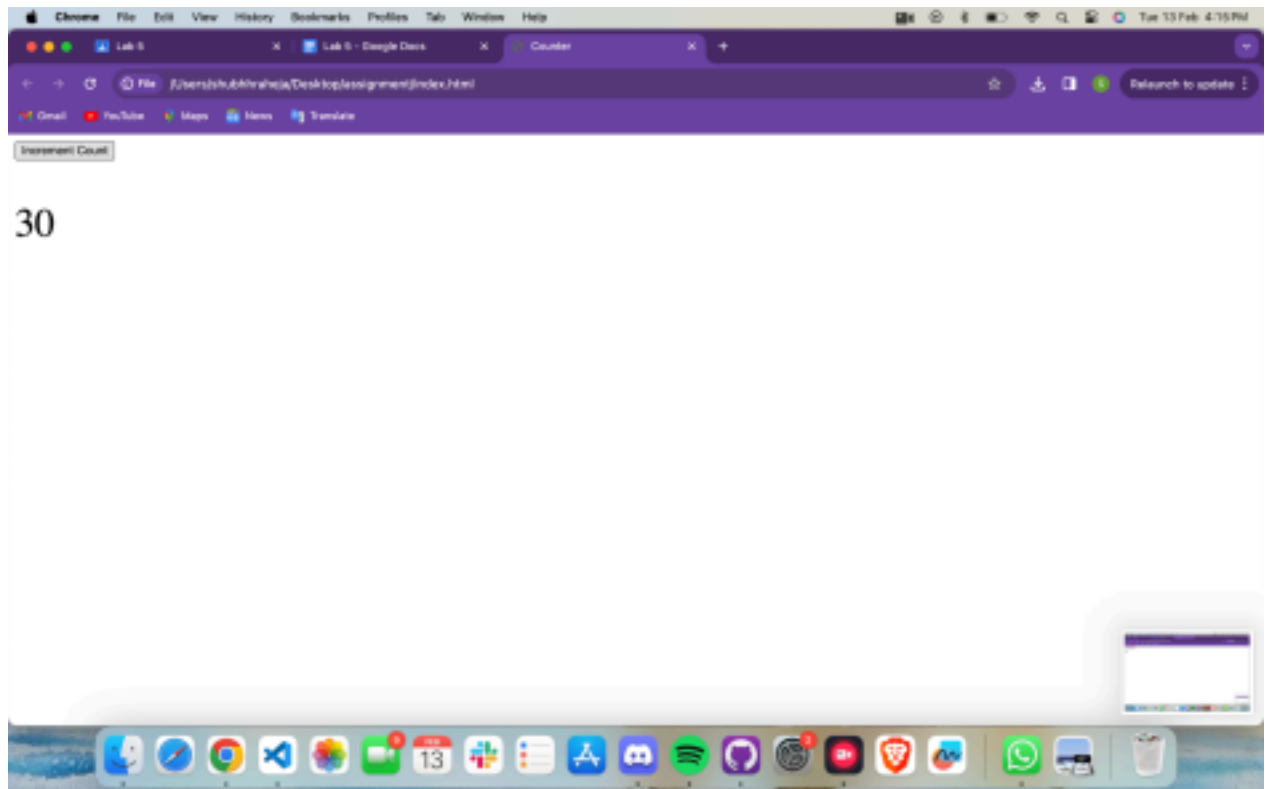


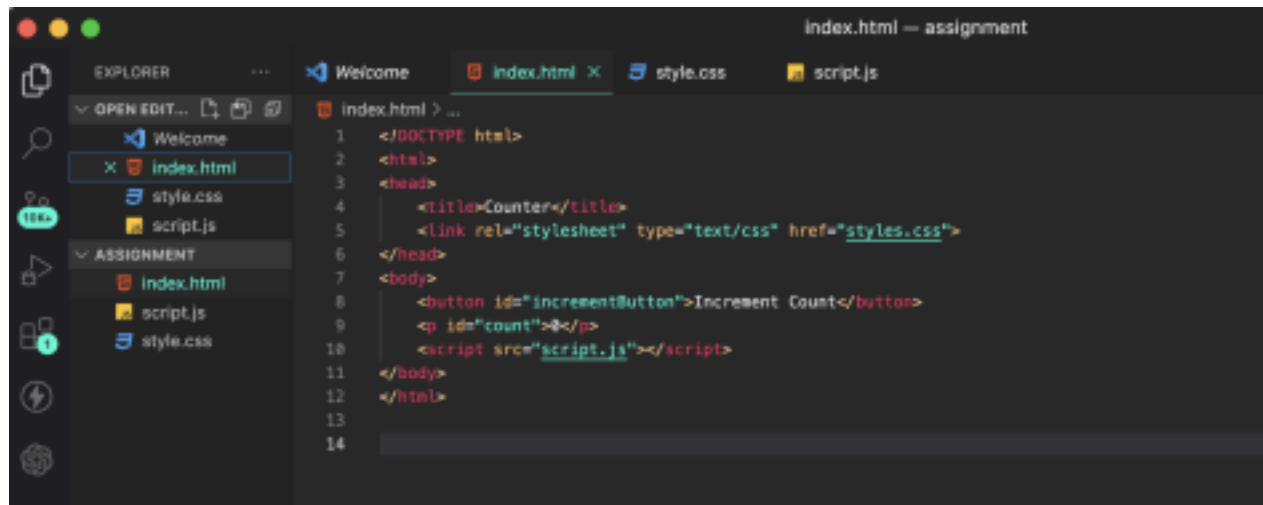


T2. Make a simple web page that contains a button and a paragraph with the id of count. Whenever this button is pressed increment the count by 1 and update the paragraph text. Also update the font size so that as the number gets larger, so does the font.

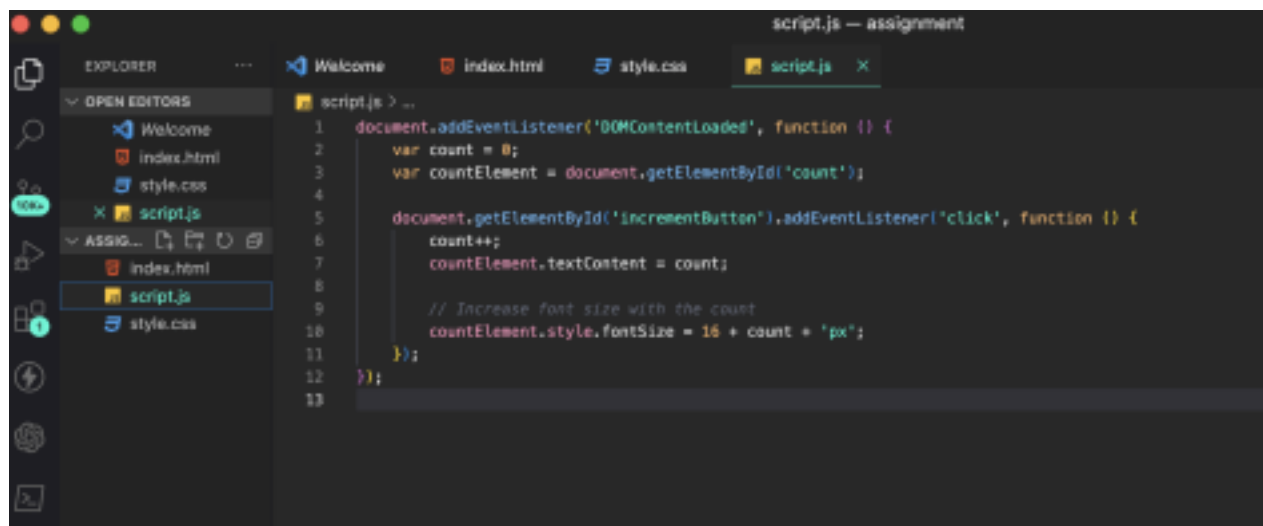




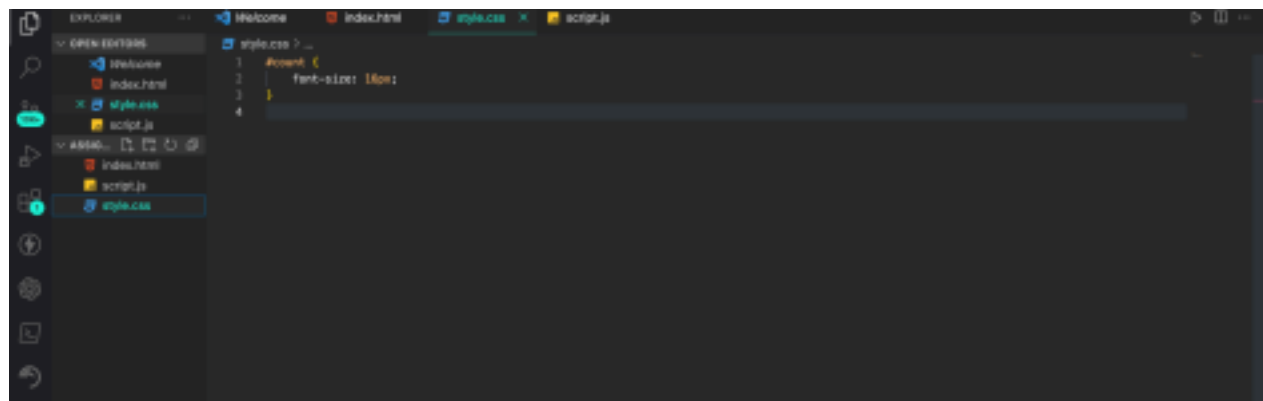


A screenshot of the Visual Studio Code editor interface. The Explorer sidebar on the left shows a project named 'assignment' with files 'index.html', 'style.css', and 'script.js'. The 'index.html' file is open in the main editor. The code in 'index.html' is as follows:

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>Counter</title>
5   <link rel="stylesheet" type="text/css" href="styles.css">
6 </head>
7 <body>
8   <button id="incrementButton">Increment Count</button>
9   <p id="count">0</p>
10  <script src="script.js"></script>
11 </body>
12 </html>
13
14
```

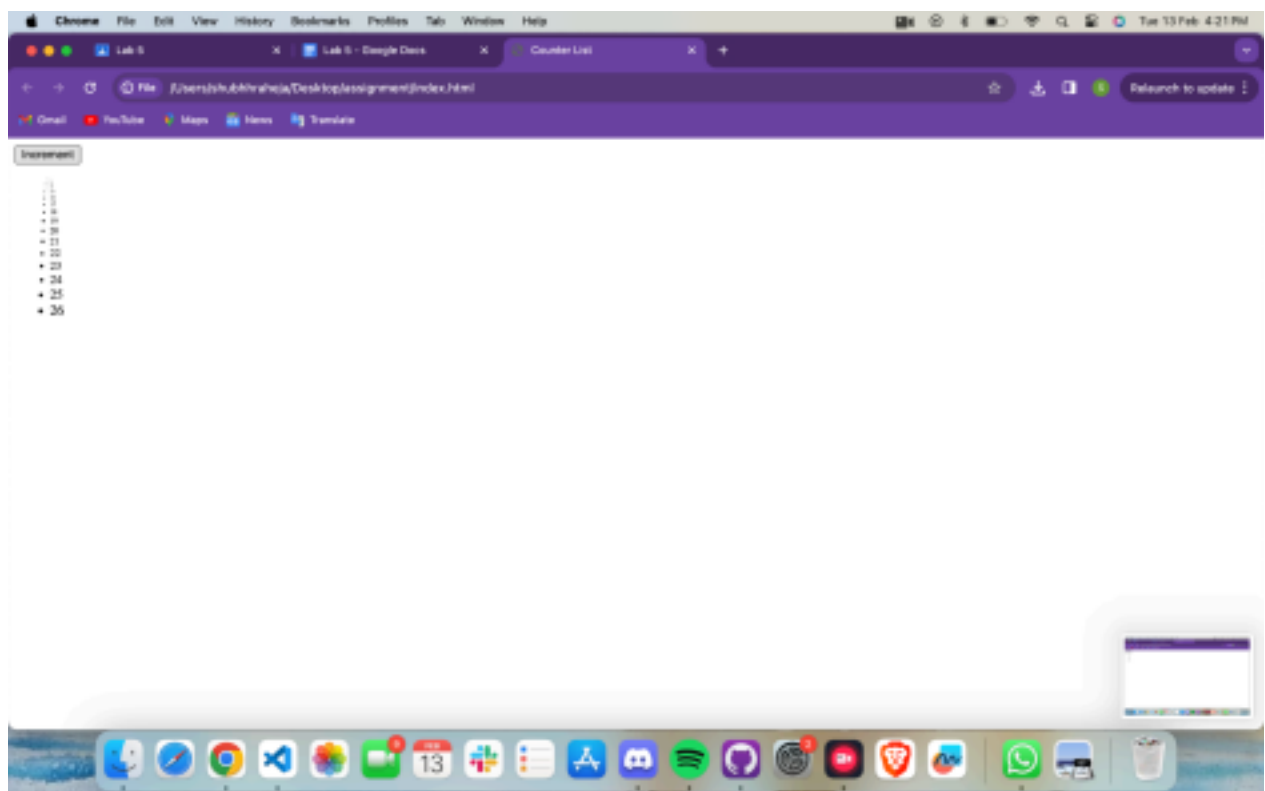
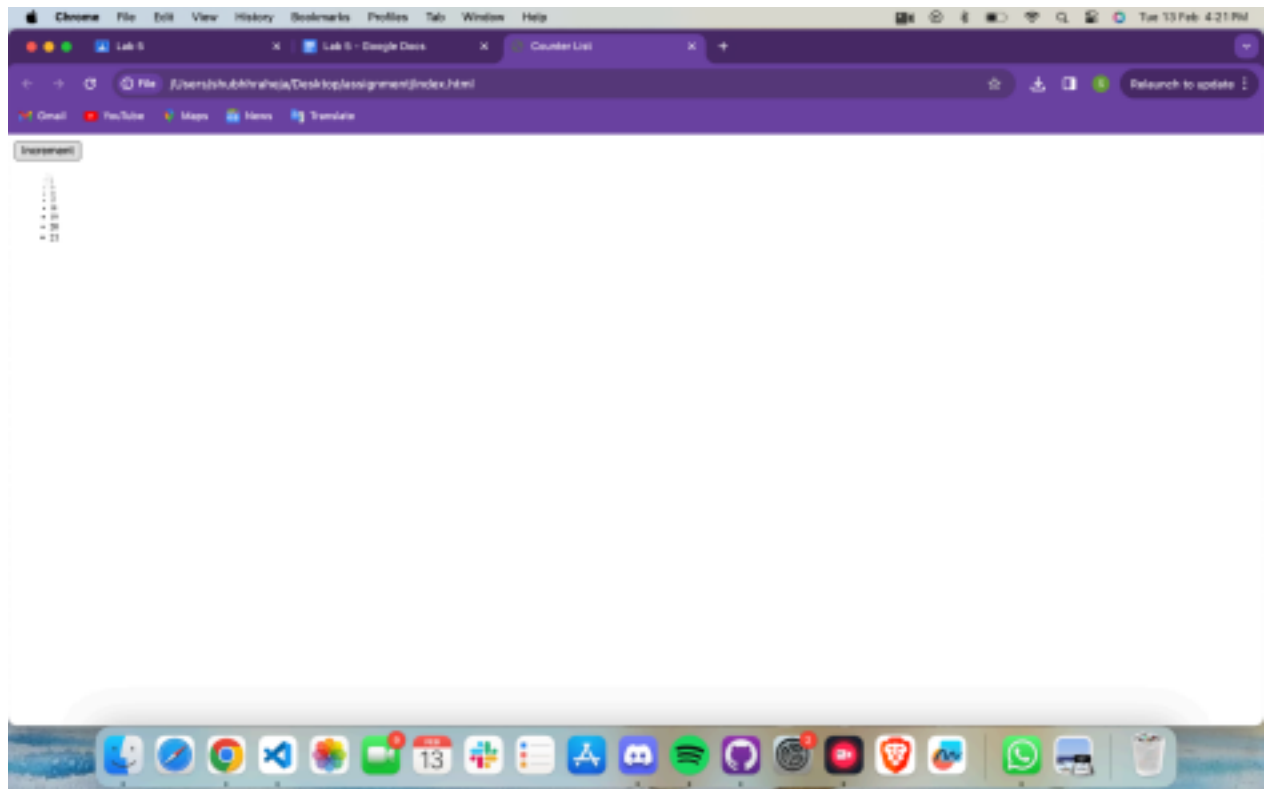
A screenshot of the Visual Studio Code editor interface. The Explorer sidebar on the left shows the 'assignment' project with 'index.html', 'style.css', and 'script.js'. The 'script.js' file is open in the main editor. The code in 'script.js' is as follows:

```
1 document.addEventListener('DOMContentLoaded', function () {
2   var count = 0;
3   var countElement = document.getElementById('count');
4
5   document.getElementById('incrementButton').addEventListener('click', function () {
6     count++;
7     countElement.textContent = count;
8
9     // Increase font size with the count
10    countElement.style.fontSize = 16 + count + 'px';
11  });
12 }
13
```

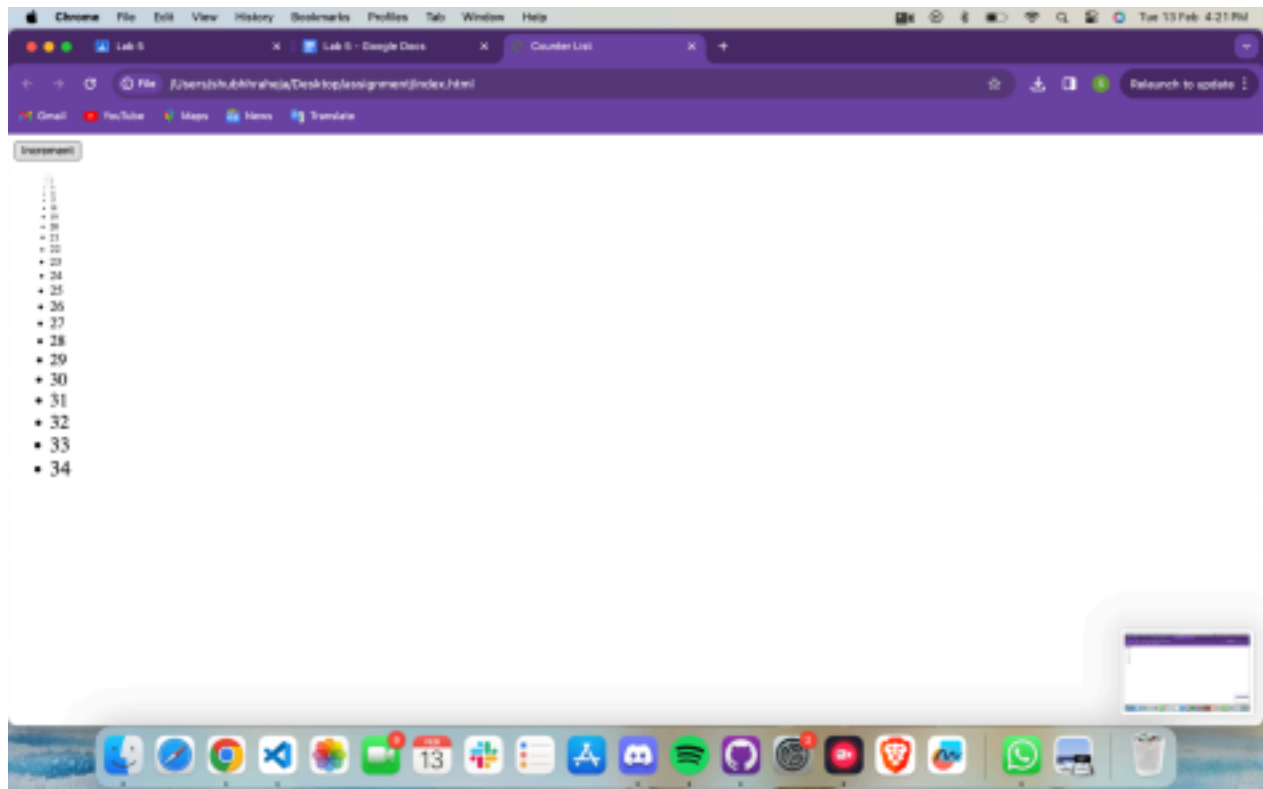
A screenshot of the Visual Studio Code editor interface. The Explorer sidebar on the left shows the 'assignment' project with 'index.html', 'style.css', and 'script.js'. The 'style.css' file is open in the main editor. The code in 'style.css' is as follows:

```
1 #count {
2   font-size: 16px;
3 }
4
```

T3. Repeat the previous exercise but make a list of numbers. In this case you will not be able to simply update the innerHTML of the paragraph, you will need to use the `document.createElement()` and `document.appendChild()` functions to add a new list item.









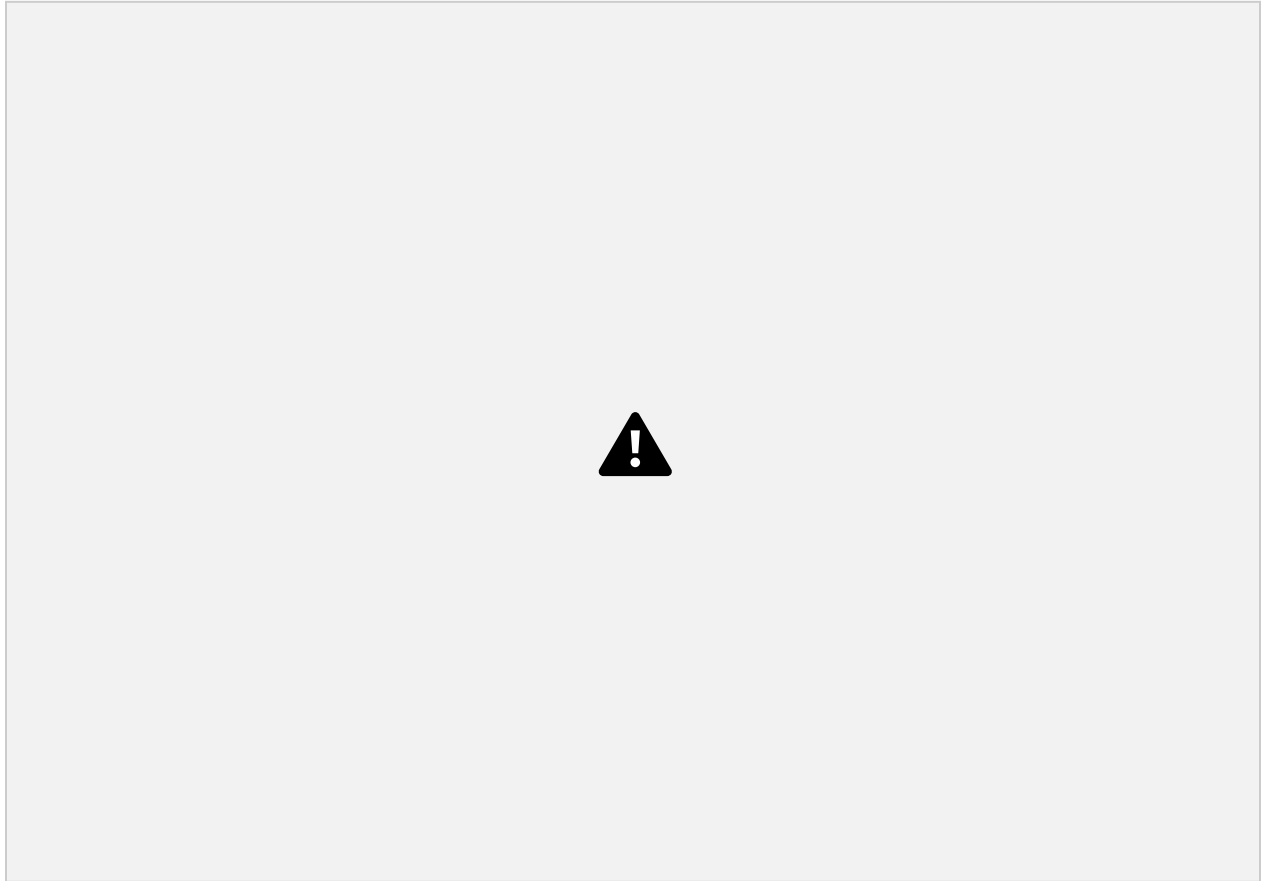




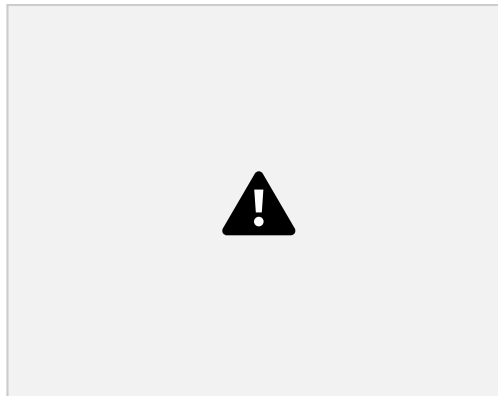
T5. Create an html page with two text input boxes and four buttons. The buttons should be labeled +, -, \*, and /. When one of these buttons is pressed you should get the value from both text input boxes and add, subtract, multiply, or divide the numbers entered in the text input boxes. The result should be displayed below the buttons. Note In order to do math on the values you read from the text input boxes you will need to use `Number.parseInt` on the value. for example suppose you get a reference to input box 1 using `myIn1 =`

`document.querySelector("#in1id");` then the statement `value1 = Number.parseInt(myIn1.value)` converts the string from the text input box to an integer. In fact most of the time Javascript will do the conversion for you automatically except for addition.





T6. Starting with the code given, create a page that looks like the following image: The rest of the page must be created using javascript. You must use `document.createElement` and the `appendChild` functions.



```
<html>
<body>
<button onclick="makePage();">Click Here</button>
</body>

</html>
```





T7. Create a Tip Calculator as a single page web application (SPA). Design an interface that allows you to enter the amount of the tip. The percentage you would like to tip, and the number of people to split the tip with. Do not use 3 text input elements! Calculate and dynamically display the tip.









