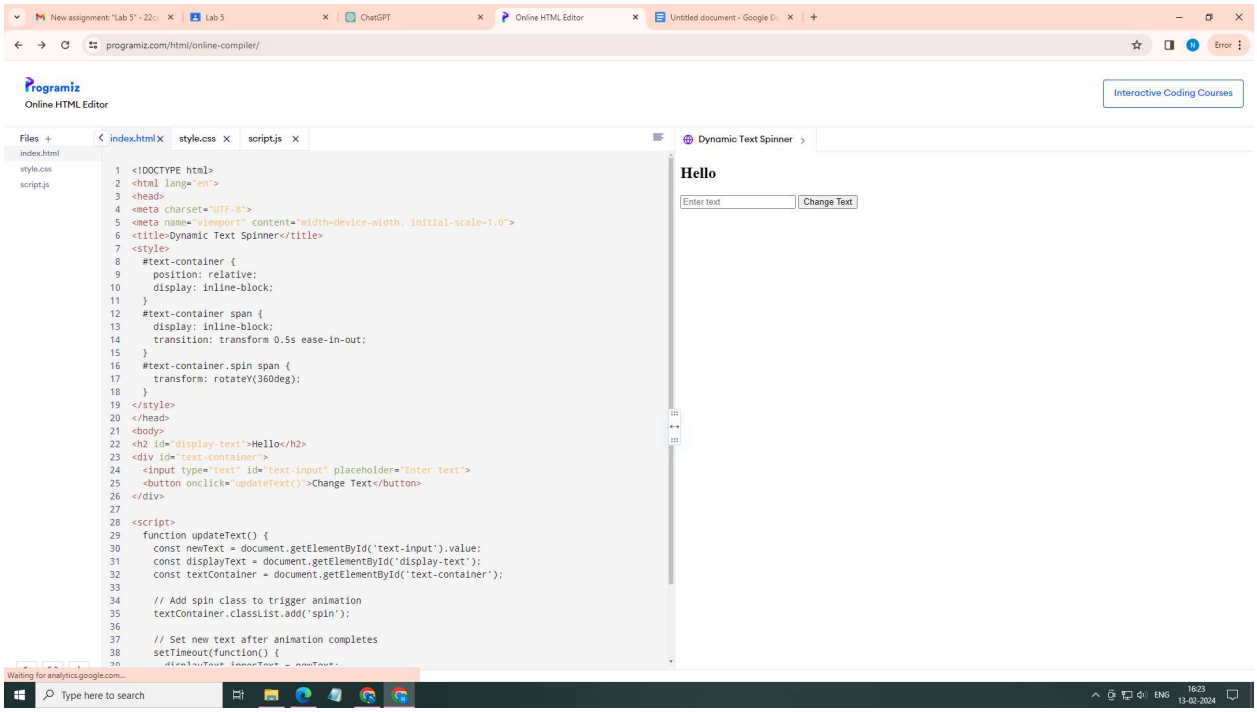
T1. Make a simple web page that contains an h2 with the word “Hello” a text input box, and a button. When the user types a word or phrase into the input box and presses the button, replace the old h2 with the word entered. Using animation, make the word spin.
Ans:-

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Dynamic Text Spinner</title>
<style>
  #text-container {
    position: relative;
    display: inline-block;
  }
  #text-container span {
    display: inline-block;
    transition: transform 0.5s ease-in-out;
  }
  #text-container.spin span {
    transform: rotateY(360deg);
  }
</style>
</head>
<body>
<h2 id="display-text">Hello</h2>
<div id="text-container">
  <input type="text" id="text-input" placeholder="Enter text">
  <button onclick="updateText()">Change Text</button>
</div>

<script>
  function updateText() {
    const newText = document.getElementById('text-input').value;
    const displayText = document.getElementById('display-text');
    const textContainer = document.getElementById('text-container');

    // Add spin class to trigger animation
    textContainer.classList.add('spin');

    // Set new text after animation completes
    setTimeout(function() {
      displayText.innerText = newText;
      textContainer.classList.remove('spin'); // Remove spin class to reset animation
```

```
  }, 500); // Adjust timeout to match transition duration
 }
</script>
</body>
</html>
```

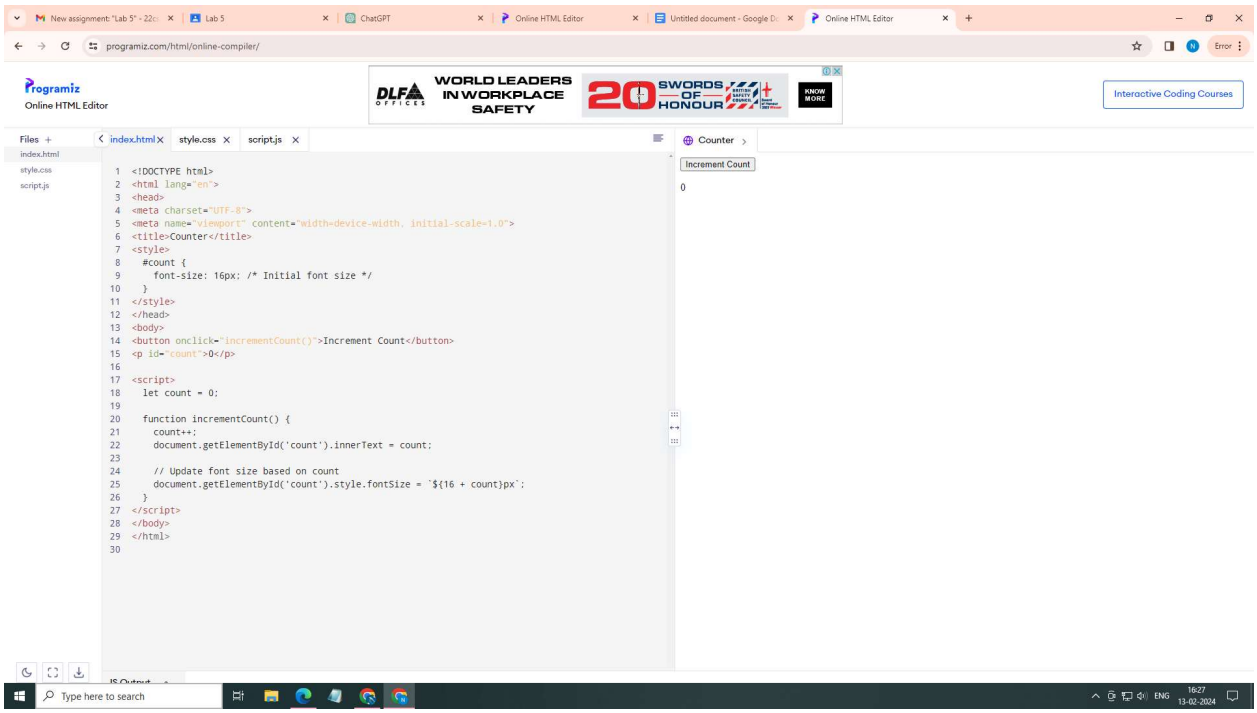


T2. Make a simple web page that contains a button and a paragraph with the id of count Whenever this button is pressed increment the count by 1 and update the paragraph text. Also update the font size so that as the number gets larger, so does the font.

Ans:-

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Counter</title>
<style>
 #count {
  font-size: 16px; /* Initial font size */
 }
</style>
</head>
<body>
<button onclick="incrementCount()">Increment Count</button>
<p id="count">0</p>
```

```
<script>
  let count = 0;

  function incrementCount() {
    count++;
    document.getElementById('count').innerText = count;

    // Update font size based on count
    document.getElementById('count').style.fontSize = `${16 + count}px`;
  }
</script>
</body>
</html>
```

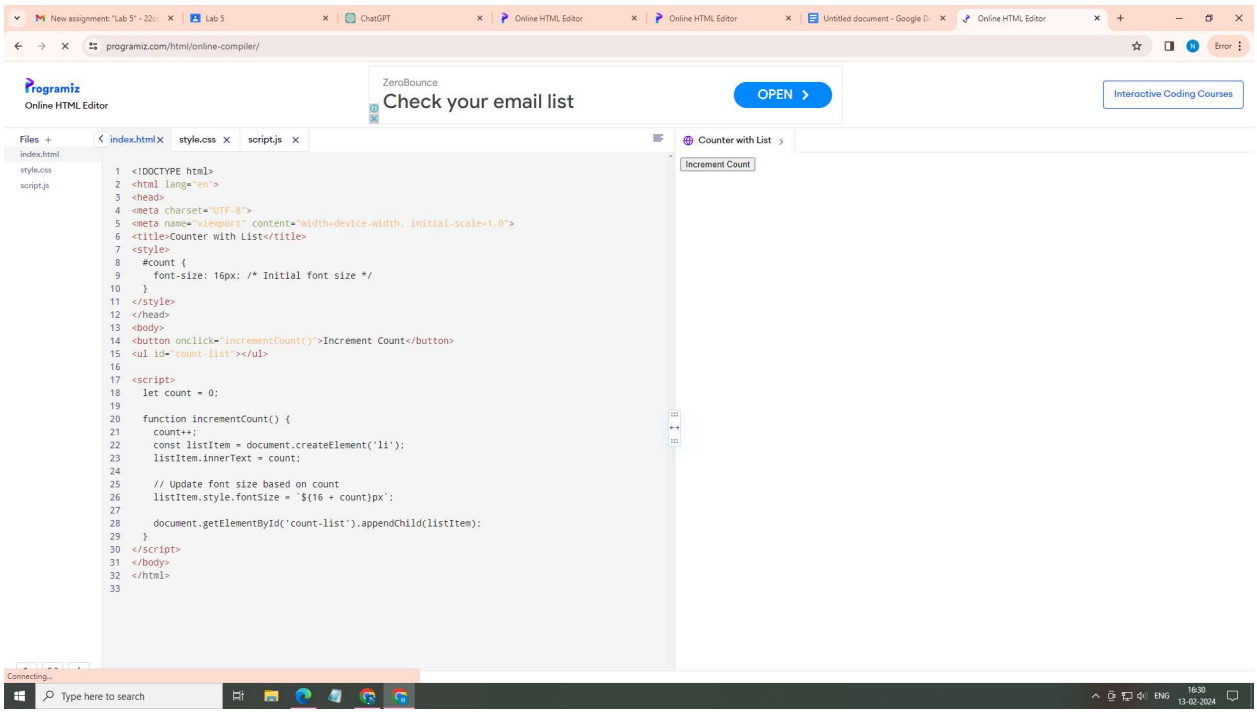


T3. Repeat the previous exercise but make a list of numbers. In this case you will not be able to simply update the innerHTML of the paragraph, you will need to use the document.createElement() and document.appendChild() functions to add a new list item.

Ans:-

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Counter with List</title>
<style>
  #count {
```

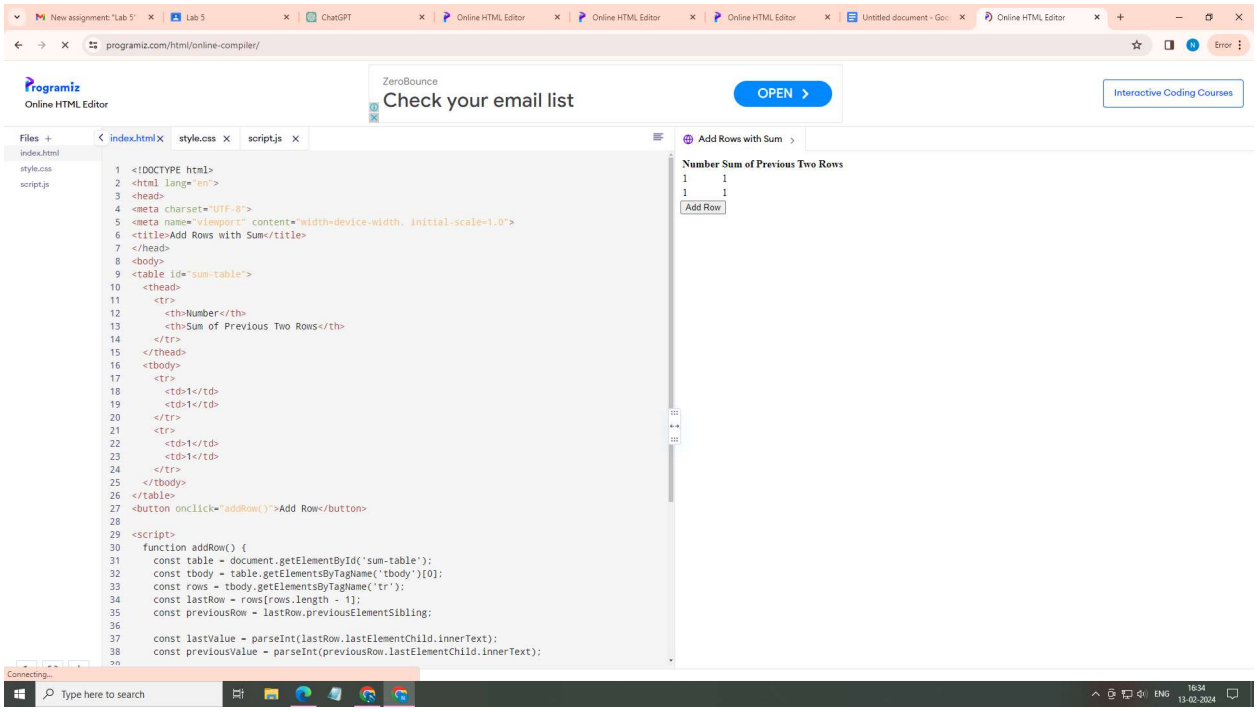
```
    font-size: 16px; /* Initial font size */
  }
</style>
</head>
<body>
<button onclick="incrementCount()">Increment Count</button>
<ul id="count-list"></ul>

<script>
  let count = 0;

  function incrementCount() {
    count++;
    const listItem = document.createElement('li');
    listItem.innerText = count;

    // Update font size based on count
    listItem.style.fontSize = `${16 + count}px`;

    document.getElementById('count-list').appendChild(listItem);
  }
</script>
</body>
</html>
```



T4. Given the following html. Every time the button is pressed you should add a row to the table, where the new row of the table contains the sum of the previous two rows. You should make use of the lastChild, previousSibling, and innerText attributes in this exercise.
Ans:-

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Add Rows with Sum</title>
</head>
<body>
<table id="sum-table">
  <thead>
    <tr>
      <th>Number</th>
      <th>Sum of Previous Two Rows</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>1</td>
      <td>1</td>
    </tr>
    <tr>
      <td>1</td>
      <td>1</td>
    </tr>
  </tbody>
</table>
<button onclick="addRow()">Add Row</button>

<script>
  function addRow() {
    const table = document.getElementById('sum-table');
    const tbody = table.getElementsByTagName('tbody')[0];
    const rows = tbody.getElementsByTagName('tr');
    const lastRow = rows[rows.length - 1];
    const previousRow = lastRow.previousElementSibling;

    const lastValue = parseInt(lastRow.lastElementChild.innerText);
    const previousValue = parseInt(previousRow.lastElementChild.innerText);

    const sum = lastValue + previousValue;
```

```
    const newRow = document.createElement('tr');
    const newNumberCell = document.createElement('td');
    const newSumCell = document.createElement('td');

    newNumberCell.innerText = sum;
    newSumCell.innerText = sum;

    newRow.appendChild(newNumberCell);
    newRow.appendChild(newSumCell);

    tbody.appendChild(newRow);
  }
</script>
</body>
</html>
```

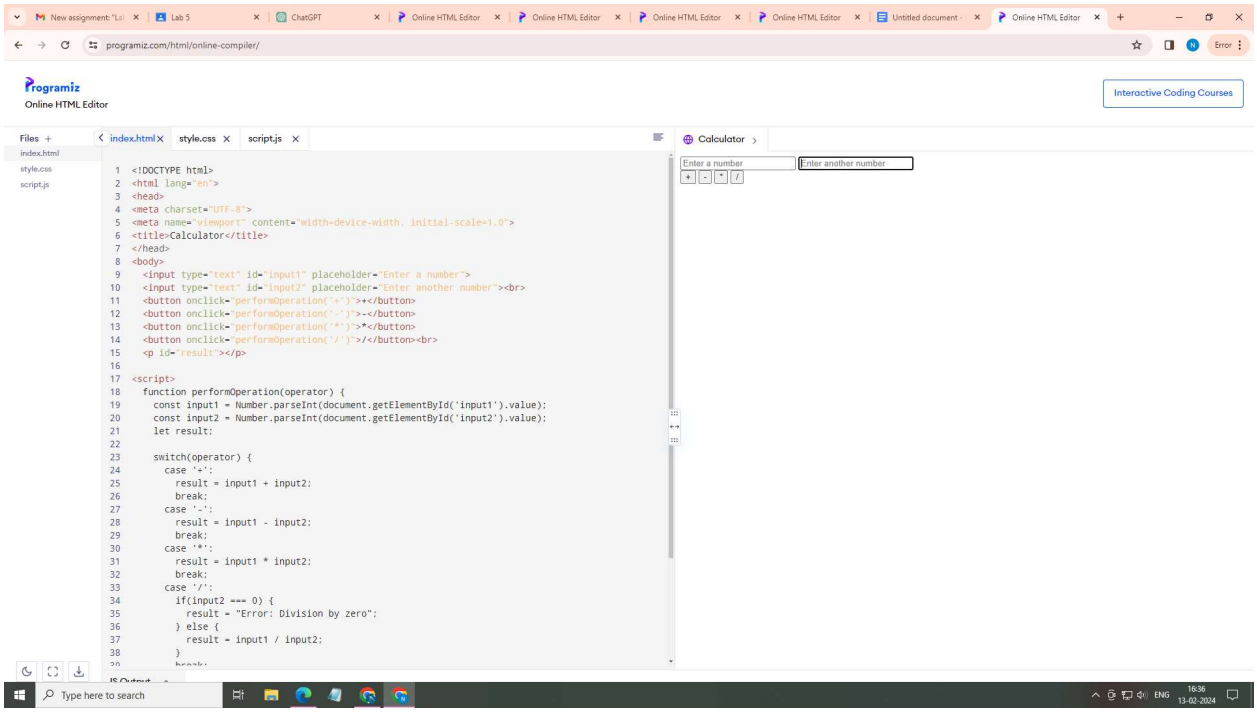


T5. Create an html page with two text input boxes and four buttons. The buttons should be labeled +, -, *, and /. When one of these buttons is pressed you should get the value from both text input boxes and add, subtract, multiply, or divide the numbers entered in the text input boxes. The result should 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.
Ans:-

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Calculator</title>
</head>
<body>
  <input type="text" id="input1" placeholder="Enter a number">
  <input type="text" id="input2" placeholder="Enter another number"><br>
  <button onclick="performOperation('+')">+</button>
  <button onclick="performOperation('-')">-</button>
  <button onclick="performOperation('*')">*</button>
  <button onclick="performOperation('/')">/</button><br>
  <p id="result"></p>

<script>
  function performOperation(operator) {
    const input1 = Number.parseInt(document.getElementById('input1').value);
    const input2 = Number.parseInt(document.getElementById('input2').value);
    let result;

    switch(operator) {
      case '+':
        result = input1 + input2;
        break;
      case '-':
        result = input1 - input2;
        break;
      case '*':
        result = input1 * input2;
        break;
      case '/':
        if(input2 === 0) {
          result = "Error: Division by zero";
        } else {
          result = input1 / input2;
        }
        break;
      default:
        result = "Invalid operator";
    }
```

```
  document.getElementById('result').innerText = "Result: " + result;
 }
</script>
</body>
</html>
```



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.

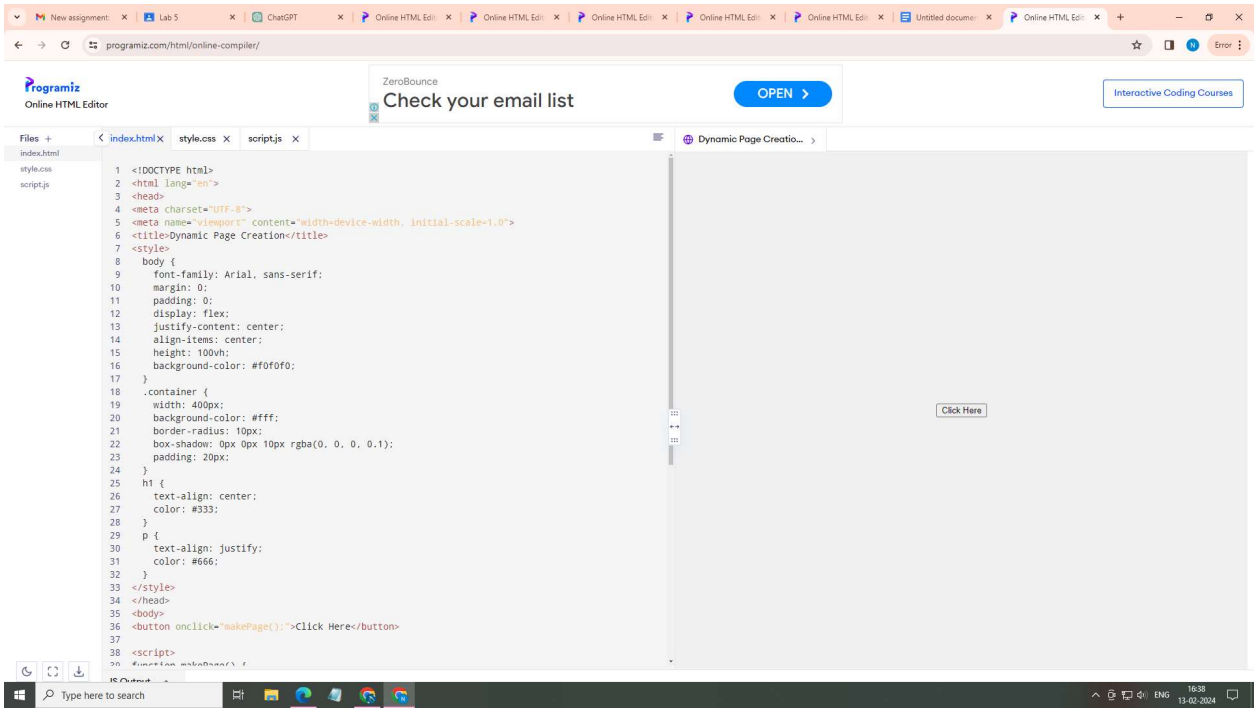
```
<html>
<body>
<button onclick="makePage();">Click Here</button>
</body>
</html>
```

Ans:-

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Dynamic Page Creation</title>
<style>
  body {
    font-family: Arial, sans-serif;
    margin: 0;
```

```
    padding: 0;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    background-color: #f0f0f0;
  }
  .container {
    width: 400px;
    background-color: #fff;
    border-radius: 10px;
    box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.1);
    padding: 20px;
  }
  h1 {
    text-align: center;
    color: #333;
  }
  p {
    text-align: justify;
    color: #666;
  }
</style>
</head>
<body>
<button onclick="makePage();">Click Here</button>

<script>
function makePage() {
  // Create container div
  const container = document.createElement('div');
  container.classList.add('container');

  // Create heading
  const heading = document.createElement('h1');
  heading.textContent = 'Dynamic Page Created with JavaScript';

  // Create paragraph
  const paragraph = document.createElement('p');
  paragraph.textContent = 'This page was dynamically created using JavaScript. We used
document.createElement() and appendChild() functions to construct the elements.';

  // Append elements to container
  container.appendChild(heading);
```

```
  container.appendChild(paragraph);

  // Append container to body
  document.body.innerHTML = ''; // Clear existing content
  document.body.appendChild(container);
}
</script>
</body>
</html>
```



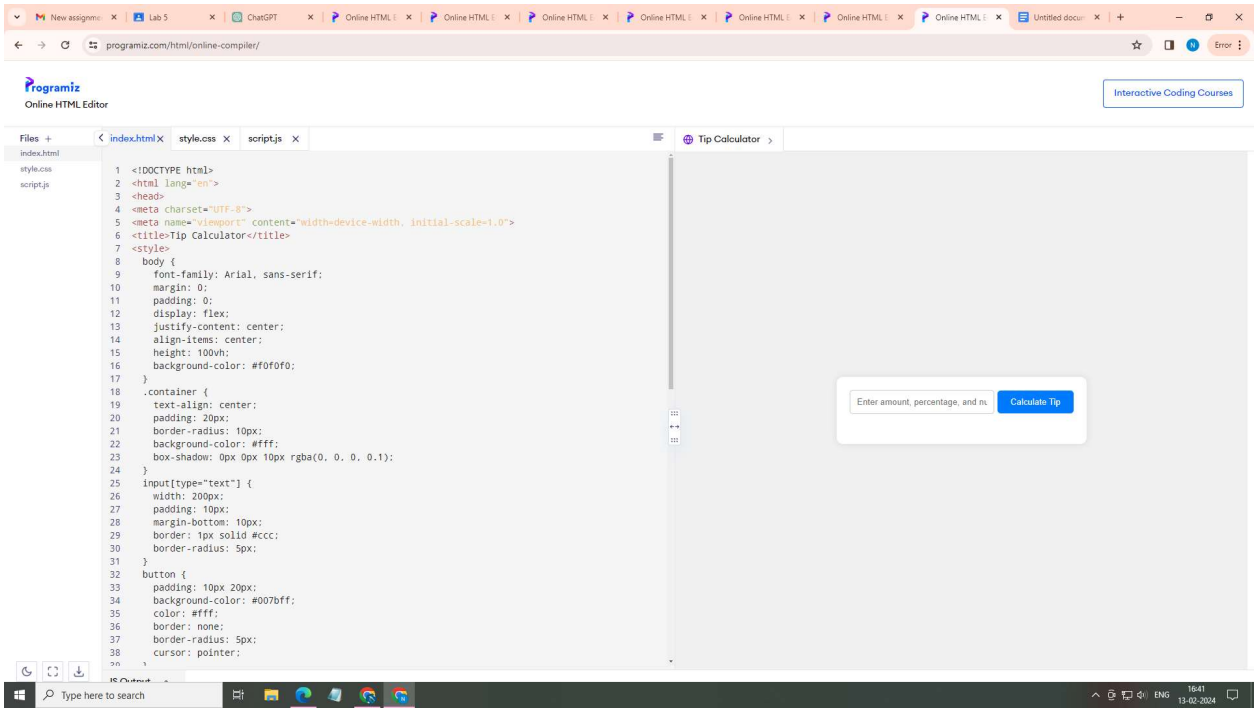
T7. Create a Tip Calculator as a single page web application (SPA). Design an interface that allows you to enter the amount of the tip. The percentage you would like to tip, and the number of people to split the tip with. Do not use 3 text input elements! Calculate and dynamically display the tip.

Ans:-

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Tip Calculator</title>
<style>
  body {
    font-family: Arial, sans-serif;
    margin: 0;
    padding: 0;
```

```
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    background-color: #f0f0f0;
  }
  .container {
    text-align: center;
    padding: 20px;
    border-radius: 10px;
    background-color: #fff;
    box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.1);
  }
  input[type="text"] {
    width: 200px;
    padding: 10px;
    margin-bottom: 10px;
    border: 1px solid #ccc;
    border-radius: 5px;
  }
  button {
    padding: 10px 20px;
    background-color: #007bff;
    color: #fff;
    border: none;
    border-radius: 5px;
    cursor: pointer;
  }
</style>
</head>
<body>
<div class="container">
  <input type="text" id="input" placeholder="Enter amount, percentage, and number of people">
  <button onclick="calculateTip()">Calculate Tip</button>
  <p id="tipResult"></p>
</div>

<script>
function calculateTip() {
  const input = document.getElementById('input').value.trim();
  const values = input.split(',');

  if (values.length !== 3) {
```

```
    document.getElementById('tipResult').innerText = 'Please enter amount, percentage, and number of people separated by commas.';
    return;
  }

  const amount = parseFloat(values[0]);
  const percentage = parseFloat(values[1]);
  const numOfPeople = parseInt(values[2]);

  if (isNaN(amount) || isNaN(percentage) || isNaN(numOfPeople)) {
    document.getElementById('tipResult').innerText = 'Invalid input. Please enter valid numbers.';
    return;
  }

  if (amount <= 0 || percentage <= 0 || numOfPeople <= 0) {
    document.getElementById('tipResult').innerText = 'Amount, percentage, and number of people must be greater than zero.';
    return;
  }

  const tipAmount = (amount * (percentage / 100)) / numOfPeople;
  const totalAmount = (amount / numOfPeople) + tipAmount;

  document.getElementById('tipResult').innerText = `Tip per person: $${tipAmount.toFixed(2)} | Total per person: $${totalAmount.toFixed(2)}`;
}
</script>
</body>
</html>
```


programiz.com/html/online-compiler/
Programiz
Online HTML Editor
Interactive Coding Courses
Files
index.html
style.css
script.js
Tip Calculator
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Tip Calculator</title>
<style>
body {
font-family: Arial, sans-serif;
margin: 0;
padding: 0;
display: flex;
justify-content: center;
align-items: center;
height: 100vh;
background-color: #f0f0f0;
}
.container {
text-align: center;
padding: 20px;
border-radius: 10px;
background-color: #fff;
box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.1);
}
input[type="text"] {
width: 200px;
padding: 10px;
margin-bottom: 10px;
border: 1px solid #ccc;
border-radius: 5px;
}
button {
padding: 10px 20px;
background-color: #007bff;
color: #fff;
border: none;
border-radius: 5px;
cursor: pointer;
Enter amount, percentage, and nu
Calculate Tip
Type here to search
ENG
16:41
13-02-2024