Name : Sudhanshu Singh Roll No: 22cs3060

LAB Assignment - 5

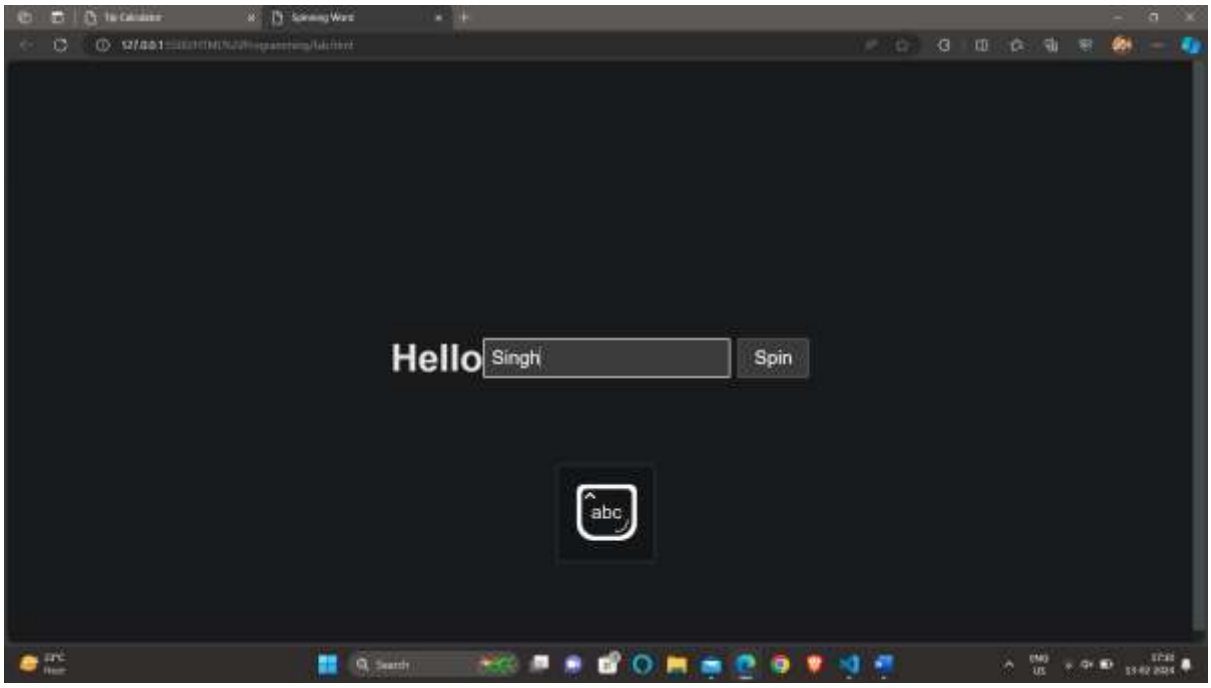
Question 1

Code :

```
<!DOCTYPE html>
 <html>
 <head>
 <title>Spinning Word</title>
 <style>
 /* Add some basic styling */
 body {
 display: flex;
 justify-content: center;
 align-items: center;
 height: 100vh;
 font-family: Arial, sans-serif;
 }
 h2 {
 font-size: 48px;
 }
 input[type="text"] {
 padding: 10px;
 font-size: 24px;
 }
 button {
 padding: 10px 20px;
 font-size: 24px;
 margin-left: 10px;
 }
 </style>
 <script>
 // Add some JavaScript to handle the button click
 function spinWord() {
 const h2 = document.querySelector('h2');
 const input = document.querySelector('input[type="text"]');
h2.innerText = input.value;
 h2.style.animation = 'spin 1s forwards';
 input.value = '';
 }
 </script>
```

```
</head>
<body>
<h2>Hello</h2>
<input type="text">
<button onclick="spinWord()">Spin</button>
<!--Add an animation rule to the CSS-->
<style>
@keyframes spin {
from {
transform: rotate(0deg);
}
to {
transform: rotate(360deg);
}
}
</style>
</body>
</html>
```

Output :



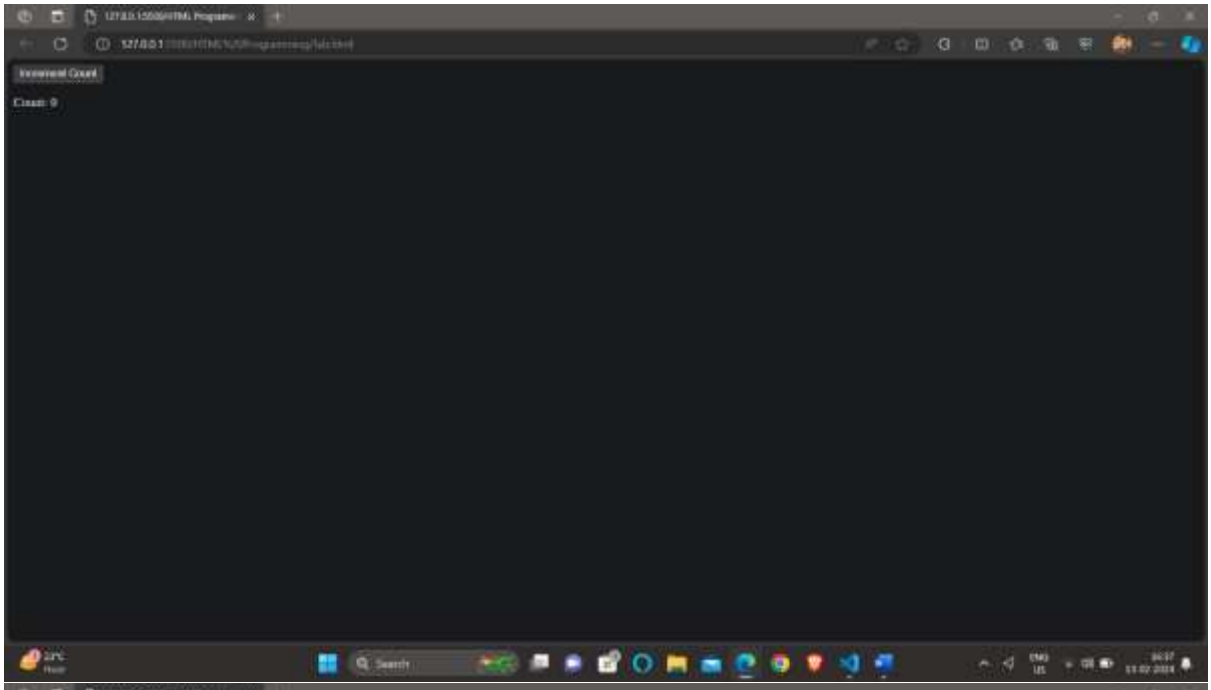
Question 2

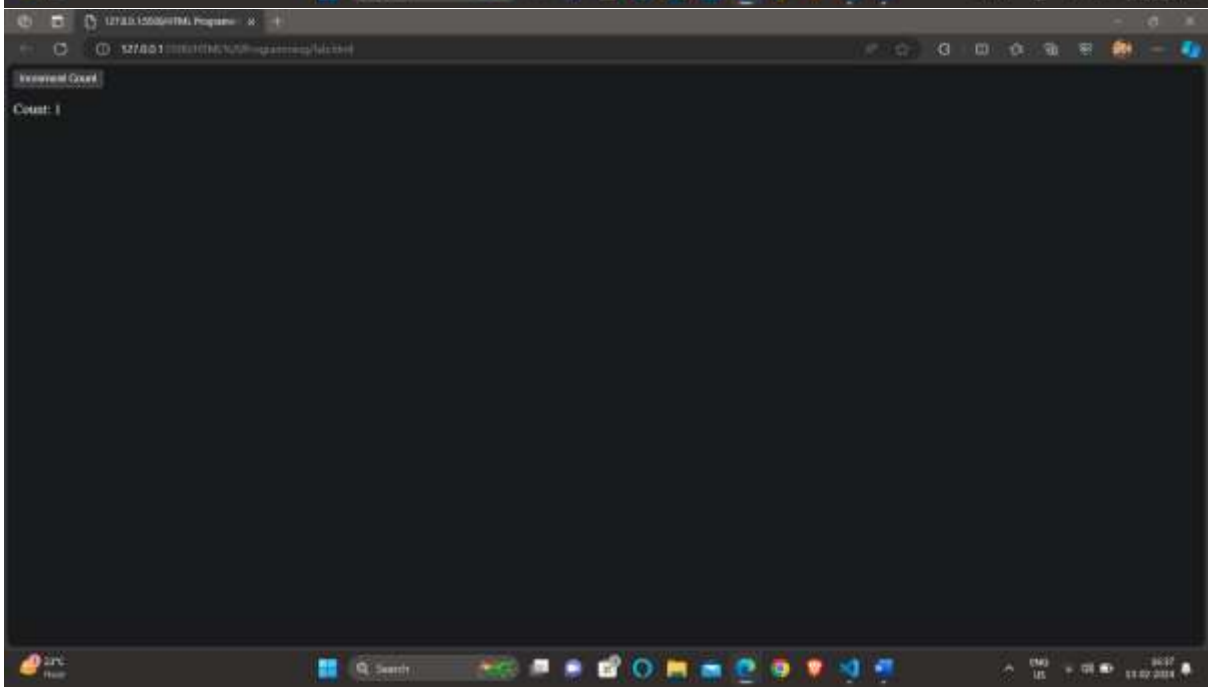
Code :

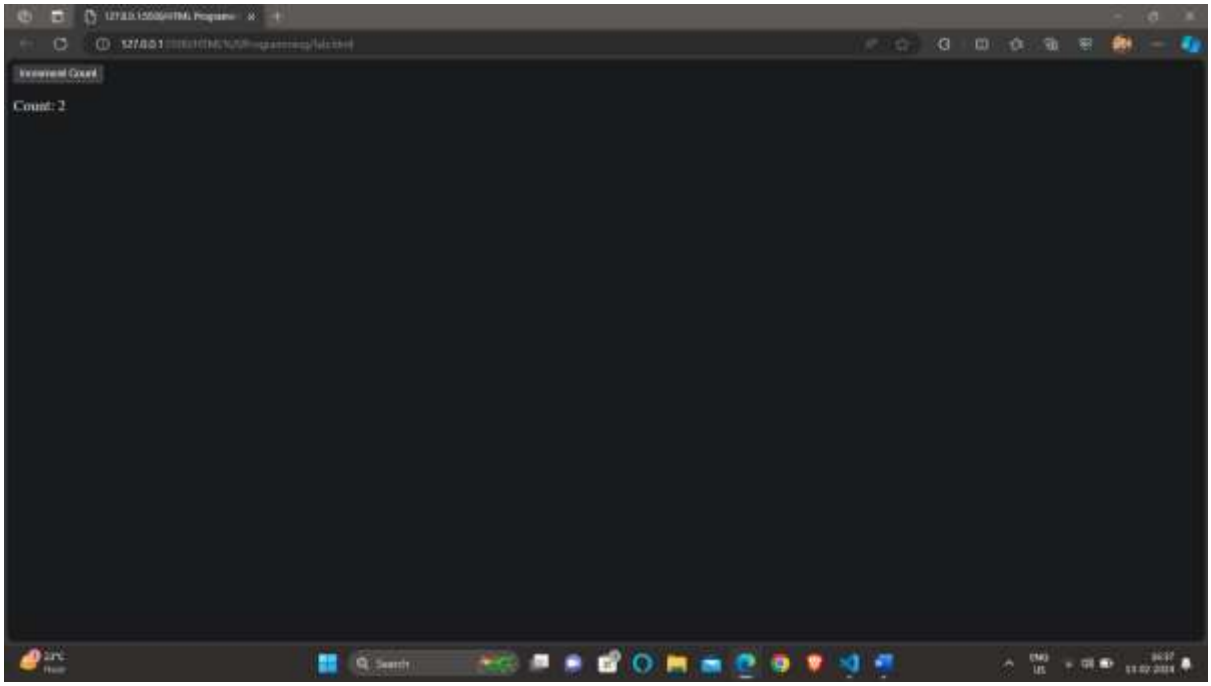
```
<!DOCTYPE html>
<html>
<head>
  <style>
    /* Add some style for the font size */
```

```
    #count {
      font-size: 1em;
    }
  </style>
</head>
<body>
  <button onclick="incrementCount()">Increment Count</button>
  <p id="count">Count: 0</p>

  <script>
    // Increment the count and update the paragraph text
    function incrementCount() {
      var count =
parseInt(document.getElementById("count").textContent.split(' ')[1]);
      count++;
      document.getElementById("count").textContent = "Count: " + count;

      // Update the font size based on the count
      var fontSize = 1 + (count / 10);
      document.getElementById("count").style.fontSize = fontSize + "em";
    }
  </script>
</body>
</html>
```

Output :


Increment Count
Count: 0


Increment Count
Count: 1



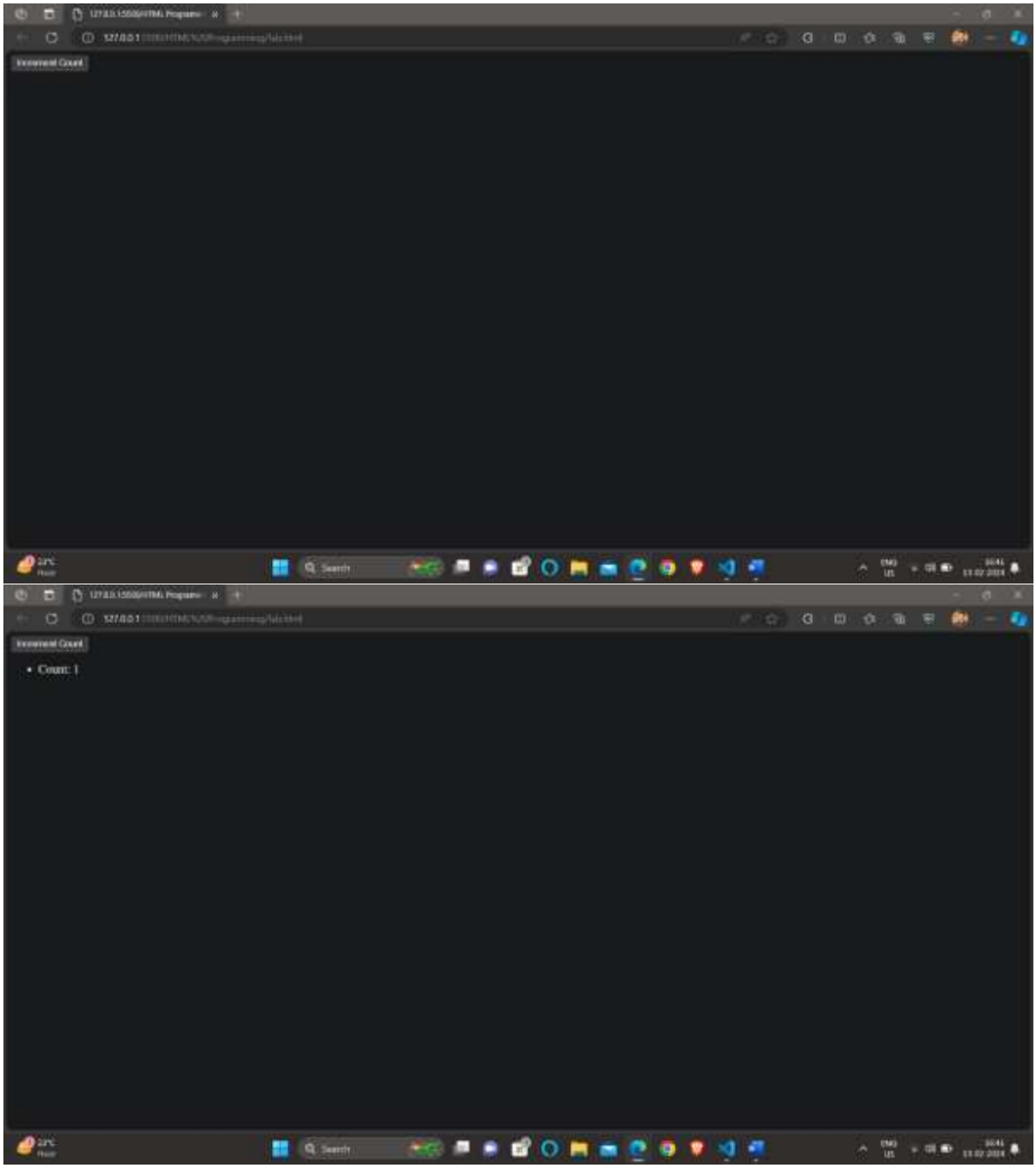
Question 3

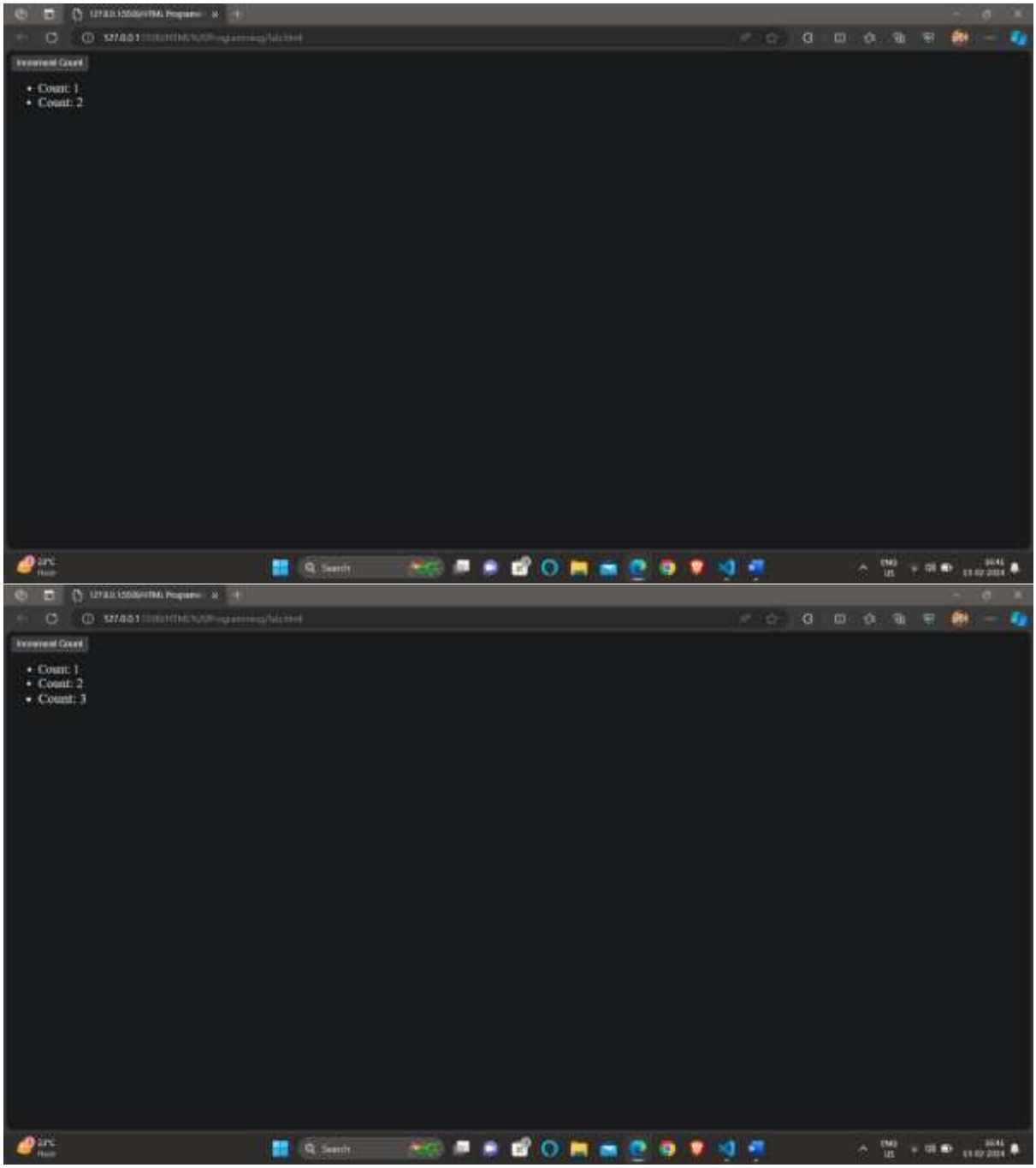
Code :

```
<!DOCTYPE html>
<html>
<head>
  <style>
    /* Add some style for the font size */
    #countList {
      font-size: 1em;
    }
  </style>
</head>
<body>
  <button onclick="incrementCount()">Increment Count</button>
  <ul id="countList"></ul>

  <script>
    // Increment the count and add a new list item
    function incrementCount() {
      var countList = document.getElementById("countList");
      var count = countList.children.length + 1;
      var listItem = document.createElement("li");
      listItem.textContent = "Count: " + count;

      // Update the font size based on the count
      var fontSize = 1 + (count / 10);
      listItem.style.fontSize = fontSize + "em";
```

```
      // Add the list item to the list
      countList.appendChild(listItem);
    }
  </script>
</body>
</html>
```

Output :





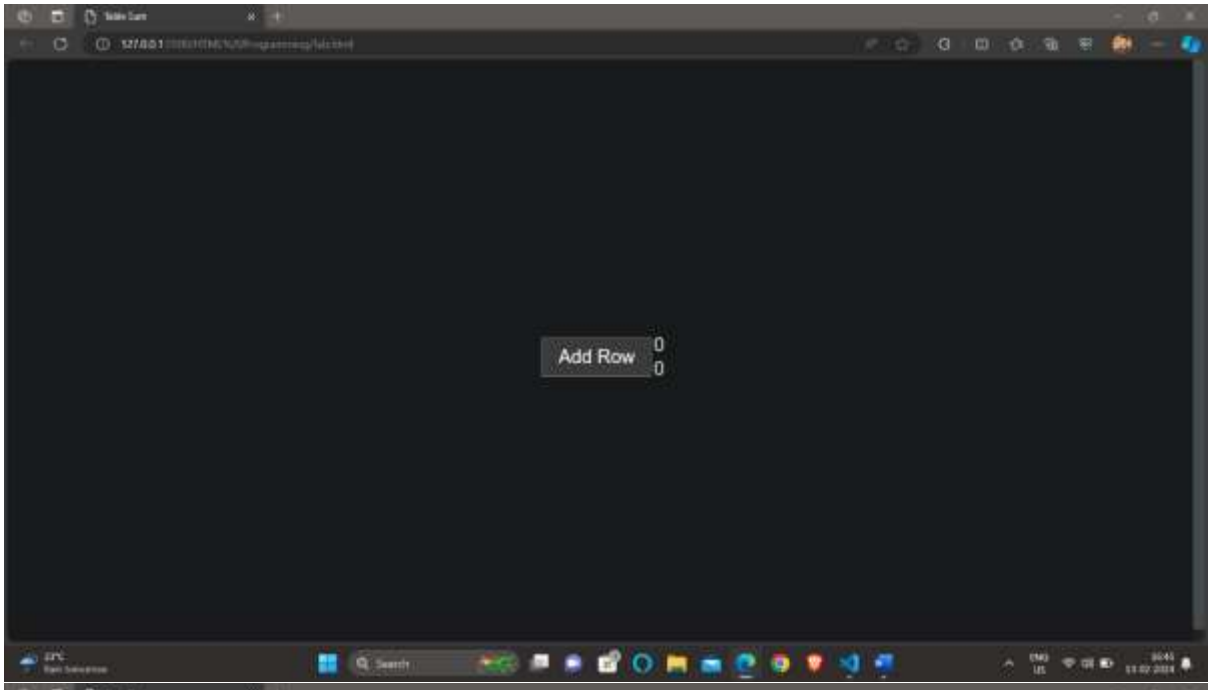
Question 4

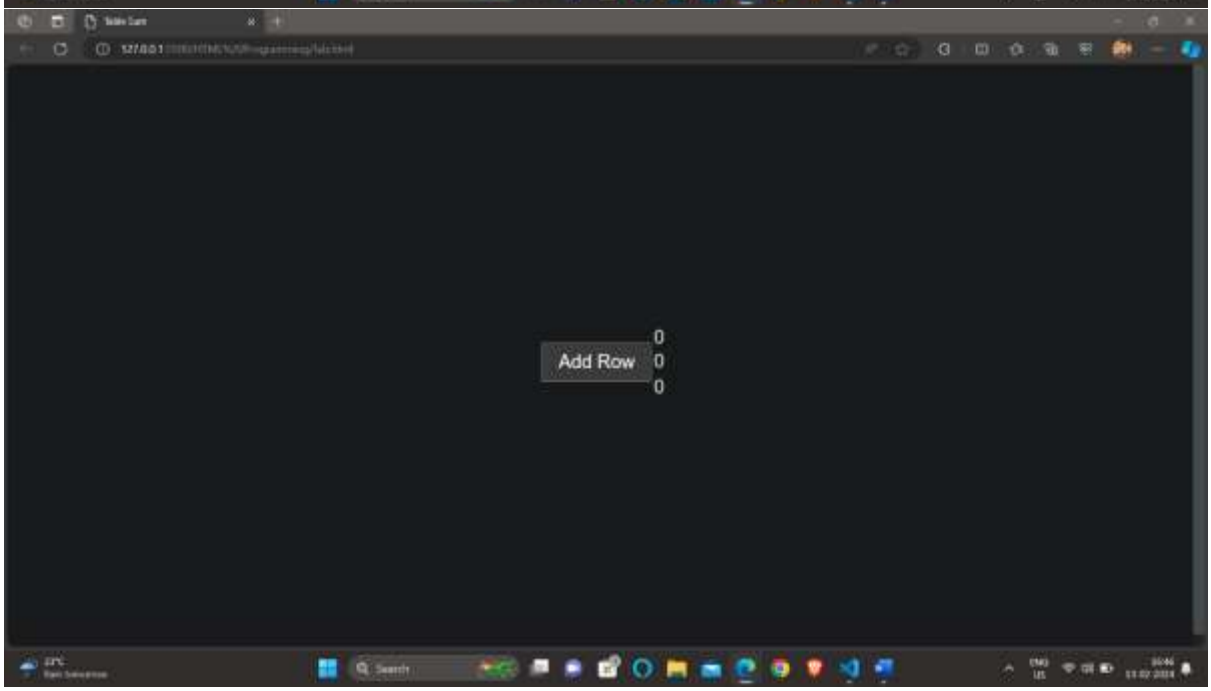
Code :

```
<!DOCTYPE html>
<html>
<head>
  <title>Table Sum</title>
  <style>
    body {
      display: flex;
      justify-content: center;
```

```
      align-items: center;
      height: 100vh;
      font-family: Arial, sans-serif;
    }
    button {
      padding: 10px 20px;
      font-size: 24px;
      margin-left: 10px;
    }
    td {
      font-size: 24px;
    }
  </style>
  <script>
    function addRow() {
      const table = document.getElementById('table');
      const currentCount = table.rows.length;
      const newRow = table.insertRow(-1);
      const sum = parseInt(table.rows[currentCount-2].cells[0].innerText) +
                  parseInt(table.rows[currentCount-3].cells[0].innerText);
      const cell = newRow.insertCell(0);
      cell.innerText = sum;
    }
  </script>
</head>
<body>
  <button onclick="addRow()">Add Row</button>
  <table id="table">
    <tr>
      <td>0</td>
    </tr>
    <tr>
      <td>0</td>
    </tr>
  </table>
</body>
</html>
```

Output :





Question 5

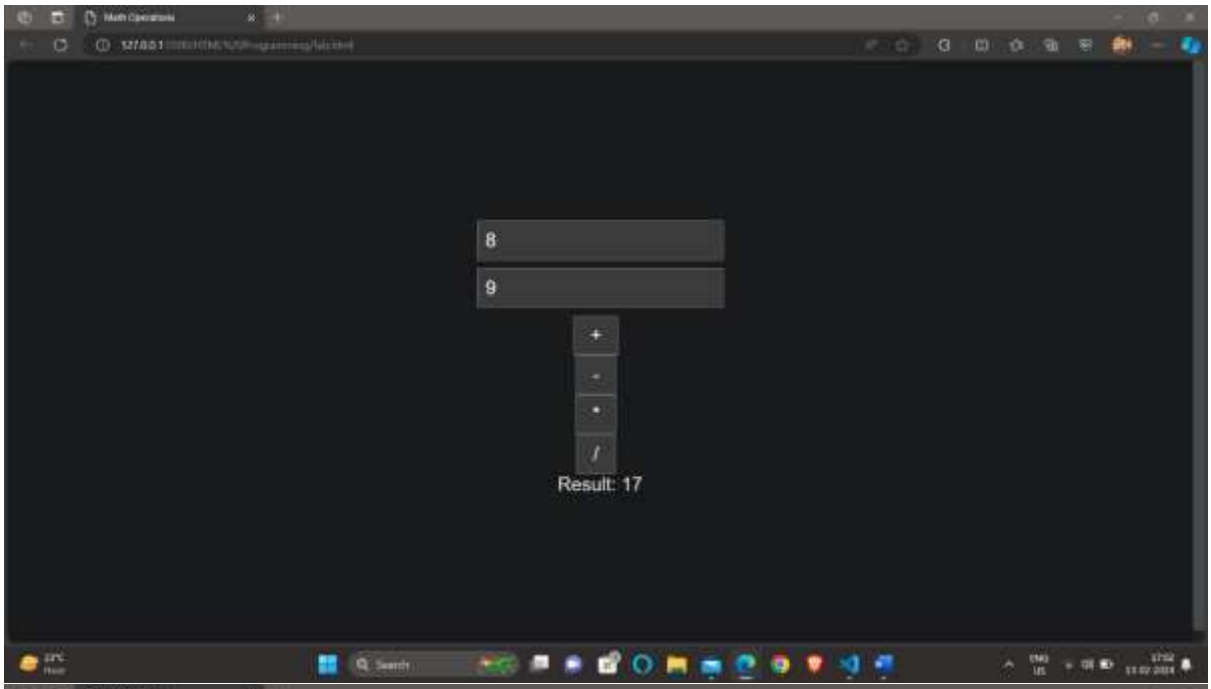
Code :

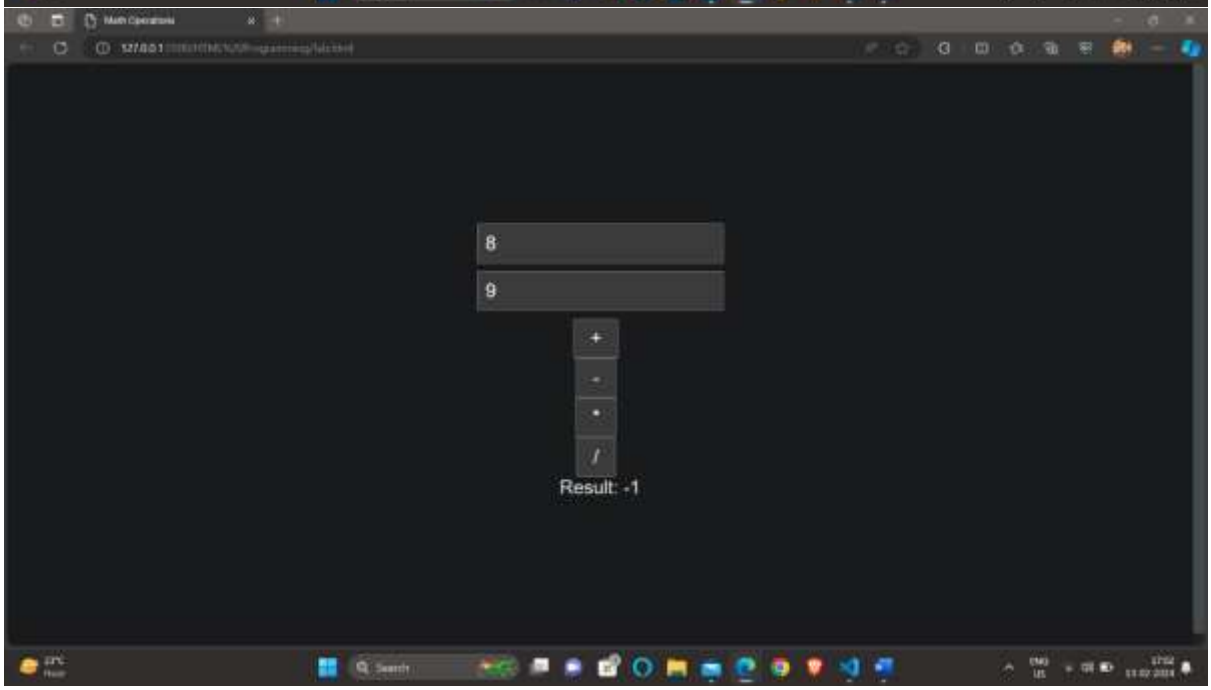
```
<!DOCTYPE html>
<html>
<head>
  <title>Math Operations</title>
  <style>
    body {
      display: flex;
      flex-direction: column;
```

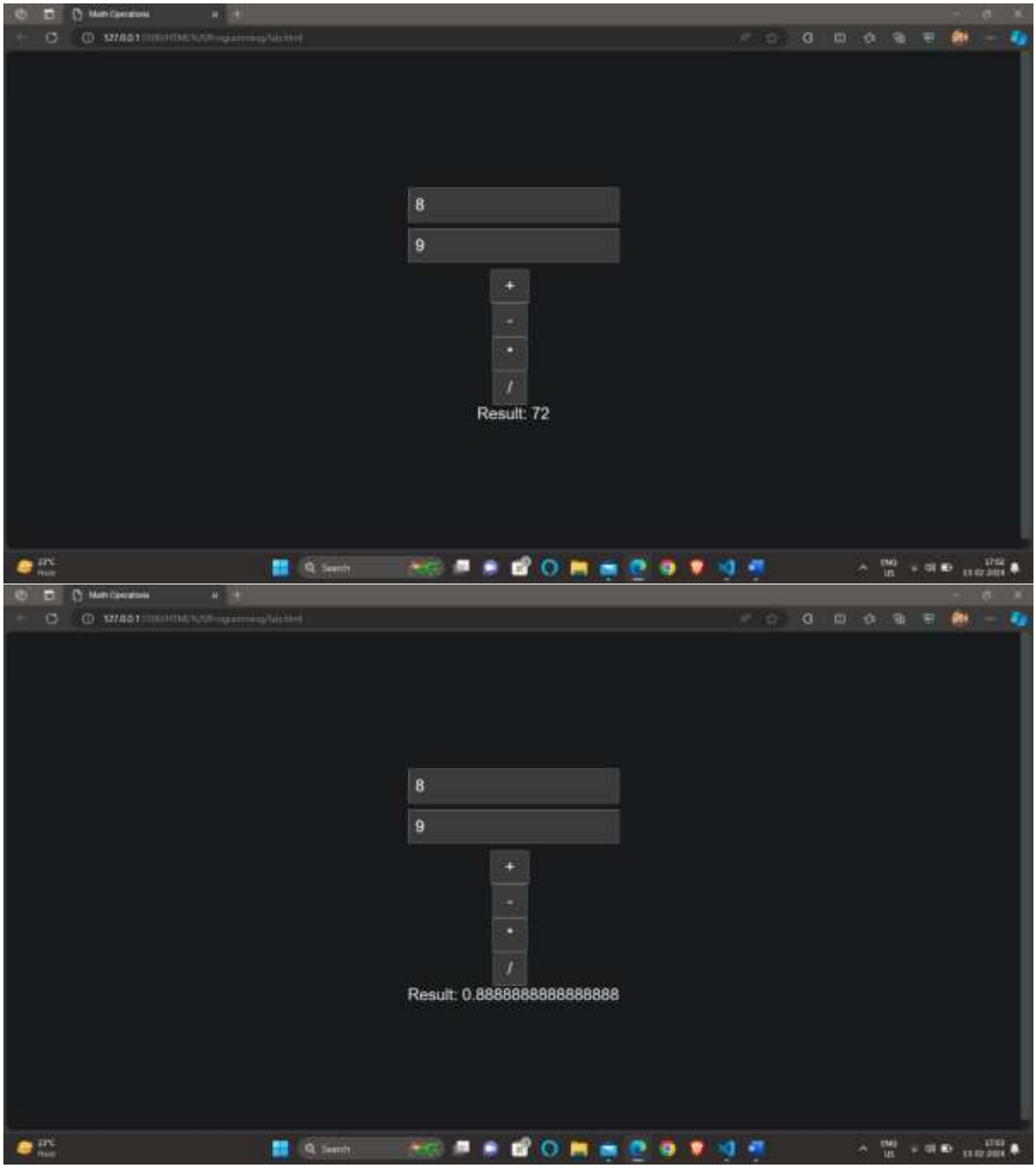
```
      justify-content: center;
      align-items: center;
      height: 100vh;
      font-family: Arial, sans-serif;
    }
    input[type="text"] {
      padding: 10px;
      font-size: 24px;
      margin-bottom: 10px;
    }
    button {
      padding: 10px 20px;
      font-size: 24px;
      margin-right: 10px;
    }
    span {
      font-size: 24px;
    }
  </style>
  <script>
    function performOperation(operation) {
      const value1 = Number.parseInt(document.querySelector("#in1id").value);
      const value2 = Number.parseInt(document.querySelector("#in2id").value);
      let result;
      switch (operation) {
        case '+':
          result = value1 + value2;
          break;
        case '-':
          result = value1 - value2;
          break;
        case '*':
          result = value1 * value2;
          break;
        case '/':
          result = value1 / value2;
          break;
      }
      document.querySelector("#result").innerText = `Result: ${result}`;
    }
  </script>
</head>
<body>
  <input type="text" id="in1id">
  <input type="text" id="in2id">
  <button onclick="performOperation('+')">+</button>
  <button onclick="performOperation('-')">-</button>
  <button onclick="performOperation('*')">*</button>
```

```
  <button onclick="performOperation('/')">/</button>
  <span id="result"></span>
</body>
</html>
```

Output :







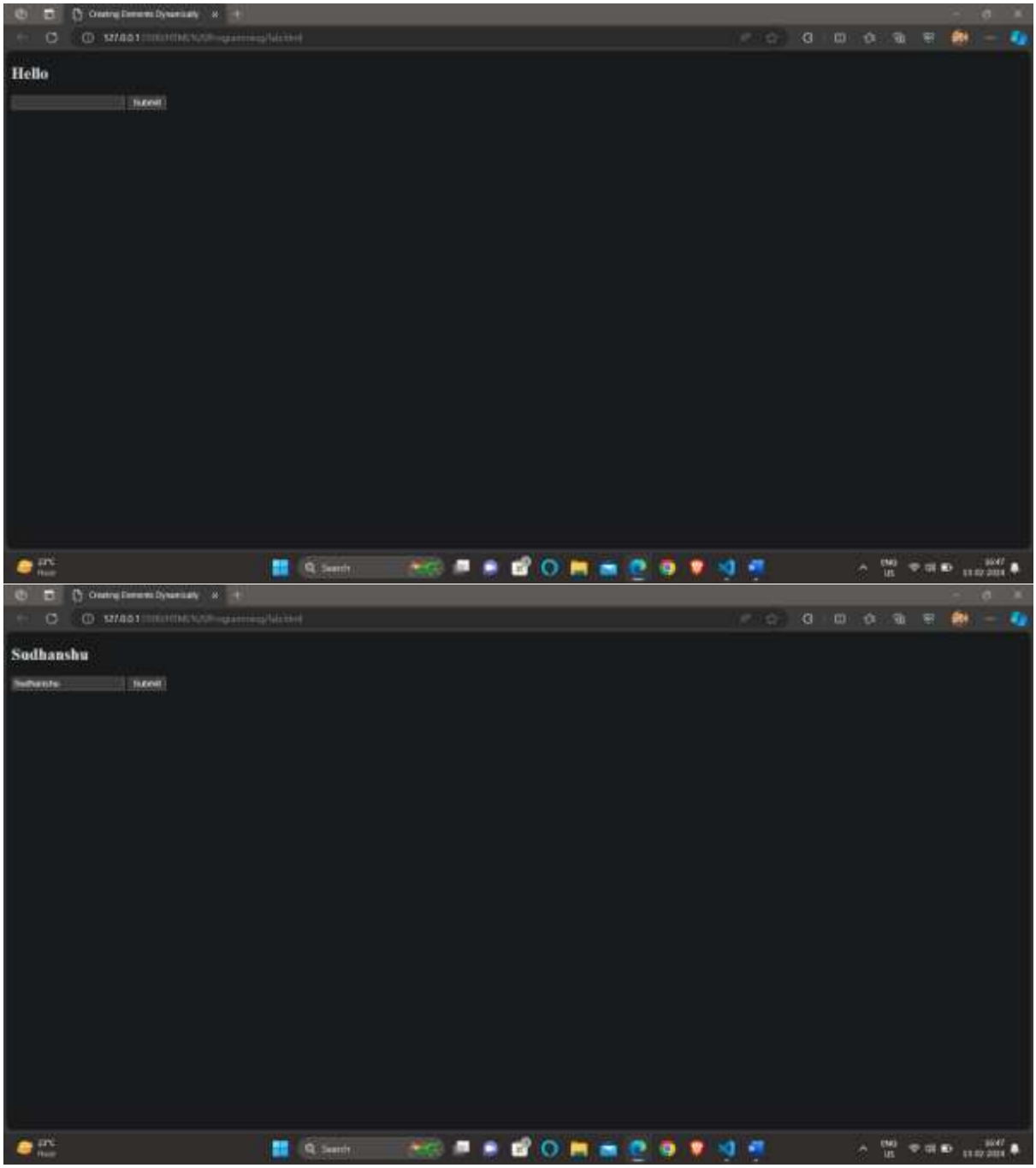
Question 6

Code :

```
<!doctype html>
<html lang="en-US">
  <head>
    <meta charset="UTF-8" />
    <title>Creating Elements Dynamically</title>
  </head>
  <body>
    <h2 id="greeting">Hello</h2>
```

```
    <input type="text" id="userInput" />
    <button onclick="changeGreeting()">Submit</button>

    <script>
      // Create a new h2 element
      function createNewGreeting(text) {
        const newGreeting = document.createElement("h2");
        newGreeting.textContent = text;
        return newGreeting;
      }

      // Replace the old h2 with the new one
      function changeGreeting() {
        const input = document.getElementById("userInput");
        const greeting = document.getElementById("greeting");

        // Remove the old h2 and add the new one
        greeting.parentNode.replaceChild(createNewGreeting(input.value),
greeting);
      }

      // Create and add a new list item to the unordered list
      function addListItem() {
        const input1 = document.querySelector("#in1id");
        const input2 = document.querySelector("#in2id");
        const operator = document.querySelector("#operator");
        const result = document.querySelector("#result");

        const list = document.getElementById("myList");
        const listItem = document.createElement("li");
        listItem.textContent = result.textContent + " " + operator.value + " "
+ input1.value + " " + input2.value;

        list.appendChild(listItem);
      }
    </script>
  </body>
</html>
```

Output :



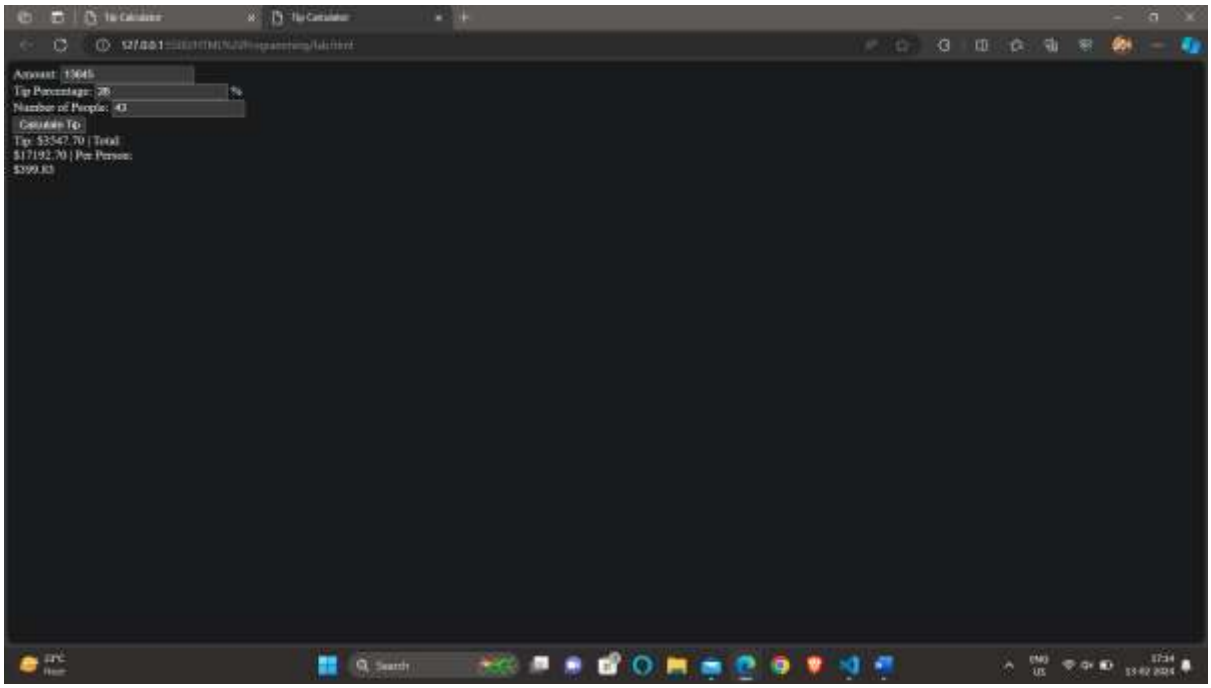
Question 7

Code :

```
<!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>
</head>
```

```
<body>
<div>
<label for="amount">Amount:</label>
<input type="number" id="amount" min="0"
step="0.01">
</div>
<div>
<label for="tipPercentage">Tip Percentage:</label>
<input type="number" id="tipPercentage" min="0"
step="1">
<span>%</span>
</div>
<div>
<label for="numPeople">Number of People:</label>
<input type="number" id="numPeople" min="1"
step="1">
</div>
<button onclick="calculateTip()">Calculate
Tip</button>
<div id="result"></div>
<script>
function calculateTip() {
const amount =
parseFloat(document.getElementById('amount').value);
const tipPercentage =
parseFloat(document.getElementById('tipPercentage').value);
const numPeople =
parseInt(document.getElementById('numPeople').value);
if (isNaN(amount) || isNaN(tipPercentage) ||
isNaN(numPeople) || amount <= 0 || tipPercentage < 0
|| numPeople < 1) {
document.getElementById('result').innerText =
'Please enter valid values';
return;
}
const tipAmount = (amount * tipPercentage) / 100;
const totalAmount = amount + tipAmount;
const amountPerPerson = totalAmount / numPeople;
document.getElementById('result').innerText =
`Tip: $${tipAmount.toFixed(2)} | Total:
$${totalAmount.toFixed(2)} | Per Person:
$${amountPerPerson.toFixed(2)}`;
}
</script>
</body>
</html>
```

Output :


Amount: 13645
Tip Percentage: 26 %
Number of People: 43
Calculate Tip
Tip: $3547.70 | Total:
$17192.70 | Per Person:
$399.83