

Name- HIMANSHU KUMAR

Roll no.- 22IT3016

Q1. <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Dynamic Text Animation</title>

<style>

#hello {

transition: transform 0.5s ease-in-out;

}

</style>

</head>

<body>

<h2 id="hello">Hello</h2>

<input type="text" id="textInput" placeholder="Enter text"> <button
id="changeTextBtn">Change Text</button>

<script>

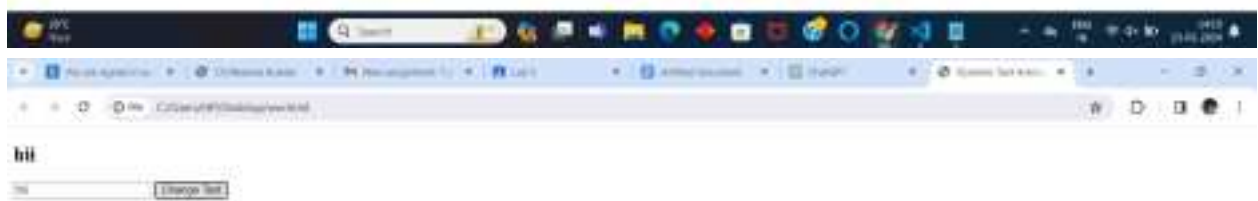
const helloHeading = document.getElementById('hello'); const textInput =
document.getElementById('textInput'); const changeTextBtn =
document.getElementById('changeTextBtn');

changeTextBtn.addEventListener('click', () => {
const newText = textInput.value.trim();
if (newText) {
helloHeading.textContent = newText;
helloHeading.style.transform = 'rotate(0deg)';
// Trigger reflow
void helloHeading.offsetWidth;
helloHeading.style.transform = 'rotate(360deg)';
}
});

</script>

</body>

</html>



```
Q2. <!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Increment Counter</title>
<style>
  #count {
    font-size: 16px; /* Initial font size */
    transition: font-size 0.2s ease-in-out;
  }
```

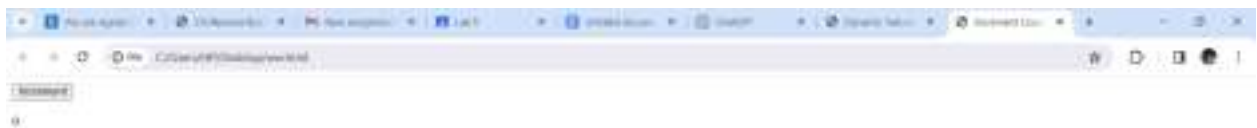
```

</style>
</head>
<body>
<button id="incrementBtn"
onclick="incrementCounter()">Increment</button>
<p id="count">0</p>
<script>
    let count = 0;

    function incrementCounter() {
        count++;
        document.getElementById('count').innerText = count;
        updateFontSize();
    }

    function updateFontSize() {
        // Increase font size as the count gets larger
        const baseFontSize = 16;
        const fontSizeIncrement = 2; // Adjust this value as needed
        document.getElementById('count').style.fontSize = baseFontSize + count *
        fontSizeIncrement + 'px';
    }
</script>
</body>
</html>

```





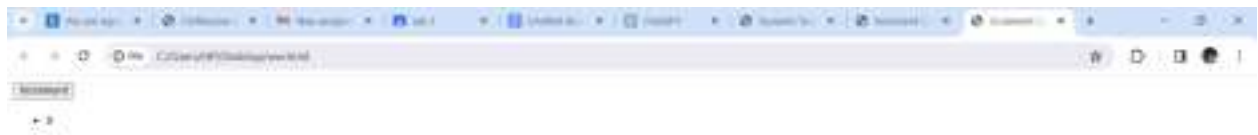
```
Q3. <!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Increment Counter with List</title>
<style>
  #count {
    font-size: 16px; /* Initial font size */
    transition: font-size 0.2s ease-in-out;
  }
```

```
</style>
</head>
<body>
<button id="incrementBtn"
onclick="incrementCounter()">Increment</button>
<ul id="countList">
  <!-- Initial list item -->
  <li id="countItem">0</li>
</ul>

<script>
  let count = 0;
  const countList = document.getElementById('countList');

  function incrementCounter() {
    count++;
    const newListItem = document.createElement('li');
    newListItem.textContent = count;
    countList.appendChild(newListItem);
    updateFontSize(newListItem);
  }

  function updateFontSize(listItem) {
    // Increase font size as the count gets larger
    const baseFontSize = 16;
    const fontSizeIncrement = 2; // Adjust this value as needed
    listItem.style.fontSize =
      baseFontSize + count * fontSizeIncrement + 'px';
  }
</script>
</body>
</html>
```





```
Q4. <!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0"> <title>Add
Row with Sum to Table</title>
</head>
<body>
<button id="addRowBtn">Add Row</button>
<table id="dataTable">
  <thead>
    <tr>
      <th>Row</th>
      <th>Sum</th>
    </tr>
  </thead>
  <tbody>
    <!-- Initial rows -->
    <tr>
      <td>1</td>
      <td>1</td>
    </tr>
    <tr>
      <td>2</td>
      <td>1</td>
    </tr>
```

```
</tbody>
</table>

<script>
  const addRowBtn = document.getElementById('addRowBtn'); const
  tableBody = document.querySelector('#dataTable tbody');

  addRowBtn.addEventListener('click', () => {
    const rows = tableBody.children;
    const lastRow = rows[rows.length - 1];
    const previousRow = lastRow.previousElementSibling; const

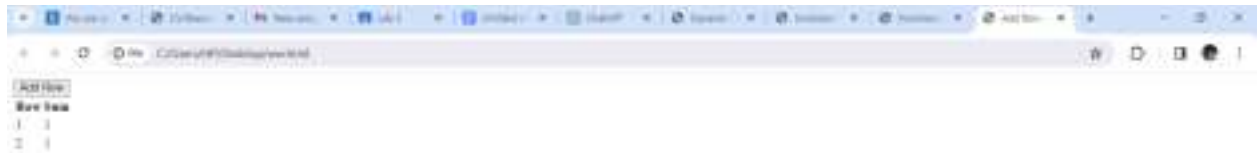
    newRow = document.createElement('tr');

    const newRowNumber = parseInt(lastRow.firstElementChild.innerText) + 1;
    const newRowSum = parseInt(lastRow.lastElementChild.innerText) +
    parseInt(previousRow.lastElementChild.innerText);

    const newRowData1 = document.createElement('td');
    newRowData1.innerText = newRowNumber;
    newRow.appendChild(newRowData1);

    const newRowData2 = document.createElement('td');
    newRowData2.innerText = newRowSum;
    newRow.appendChild(newRowData2);

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

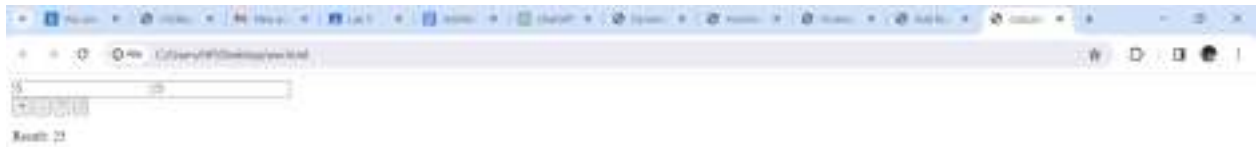
Q5. <!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Calculator</title>
</head>
<body>
<input type="text" id="input1" placeholder="Enter number"> <input
type="text" id="input2" placeholder="Enter number">


```
<button onclick="calculate('+')">+</button>
<button onclick="calculate('-')">-</button>
<button onclick="calculate('*')">*</button>
<button onclick="calculate('/')">/</button>
<p id="result"></p>

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

    switch (operation) {
      case '+':
        result = input1 + input2;
        break;
      case '-':
        result = input1 - input2;
        break;
      case '*':
        result = input1 * input2;
        break;
      case '/':
        result = input1 / input2;
        break;
      default:
        result = 'Invalid operation';
    }

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



Q6. <!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;

padding: 20px;

background-color: #fff;

border-radius: 10px;

box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);

text-align: center;

}

```

h1 {
  color: #007bff;
  margin-bottom: 20px;
}

p {
  margin-bottom: 20px;
}

ul {
  text-align: left;
  margin-left: 40px;
  margin-bottom: 20px;
}

li {
  margin-bottom: 10px;
}

.button {
  display: inline-block;
  margin: 5px;
  padding: 10px 20px;
  background-color: #007bff;
  color: #fff;
  border: none;
  border-radius: 5px;
  cursor: pointer;
  transition: background-color 0.3s ease;
}

.button:hover {
  background-color: #0056b3;
}
</style>
</head>
<body>
    <button onclick="makePage();" class="button">Click Here</button>

<script>
function makePage() {
  // Clear existing content
  document.body.innerHTML = ";

```

```
// Create container div
const container = document.createElement('div');
container.id = 'container';

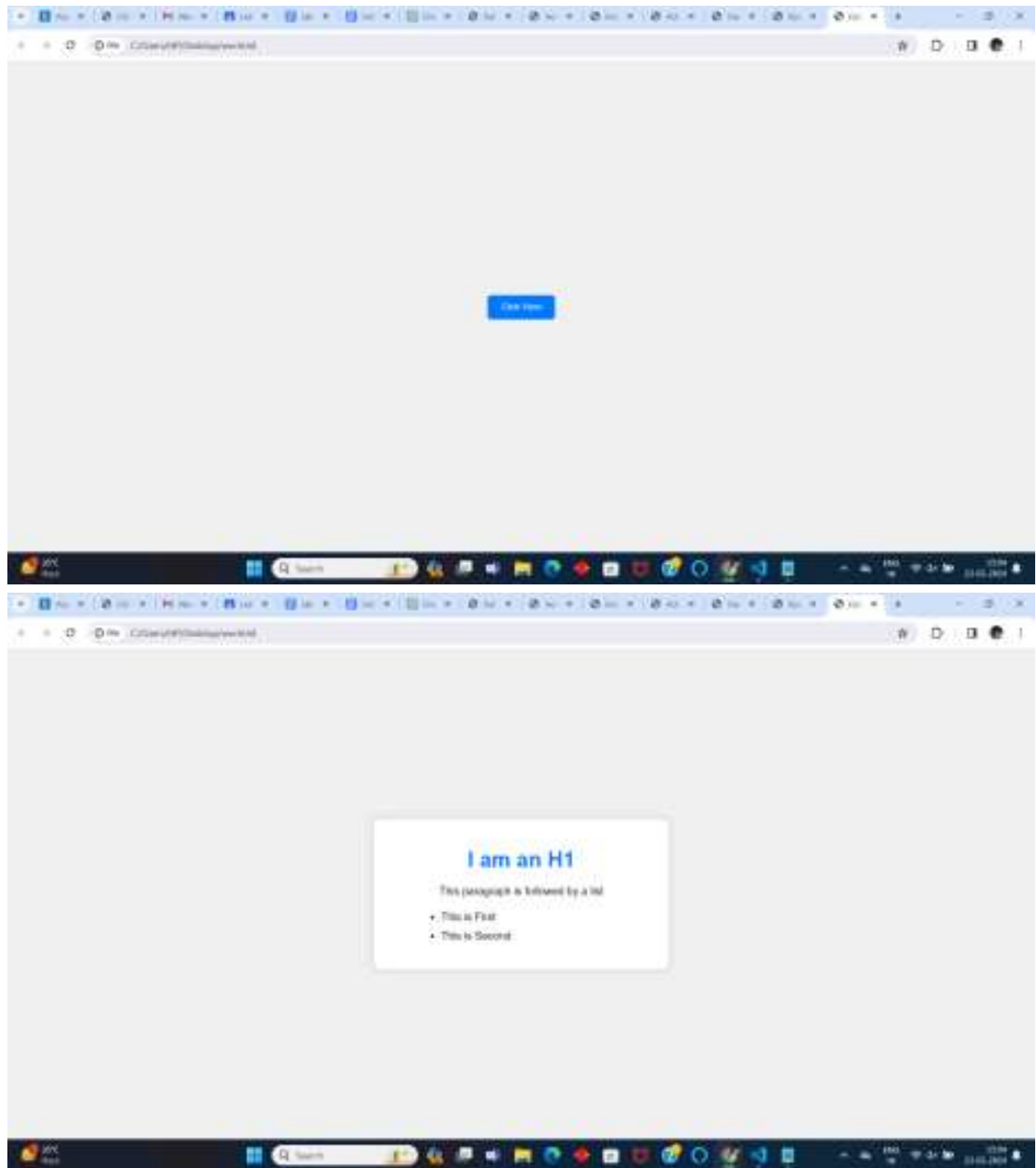
// Create h1
const title = document.createElement('h1');
title.textContent = 'I am an H1';

// Create paragraph
const paragraph = document.createElement('p'); paragraph.textContent
= 'This paragraph is followed by a list';

// Create list
const list = document.createElement('ul');
const items = ['This is First', 'This is Second'];
items.forEach(text => {
  const listItem = document.createElement('li');
  listItem.textContent = text;
  list.appendChild(listItem);
});

// Append elements to container
container.appendChild(title);
container.appendChild(paragraph);
container.appendChild(list);

// Append container to body
document.body.appendChild(container);
}
</script>
</body>
</html>
```



Q7. <!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;
}
```

```
#calculator {
padding: 20px;
background-color: #fff;
border-radius: 10px;
box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
text-align: center;
}
```

```
label {
display: block;
margin-bottom: 10px;
}
```

```
input {
width: 100%;
padding: 10px;
margin-bottom: 20px;
border-radius: 5px;
border: 1px solid #ccc;
box-sizing: border-box;
}
```

```
button {
padding: 10px 20px;
background-color: #007bff;
color: #fff;
border: none;
border-radius: 5px;
cursor: pointer;
transition: background-color 0.3s ease;
}
```

```
button:hover {
background-color: #0056b3;
}
```

```

#tipResult {
  margin-top: 20px;
  font-size: 24px;
}
</style>
</head>
<body>
<div id="calculator">
  <label for="billAmount">Bill Amount ($):</label>
    <input type="number" id="billAmount" placeholder="Enter bill amount">

  <label for="tipPercentage">Tip Percentage (%):</label> <input
type="number" id="tipPercentage" placeholder="Enter tip percentage">

  <label for="numPeople">Number of People:</label>
  <input type="number" id="numPeople" placeholder="Enter number of people">

  <button onclick="calculateTip()">Calculate Tip</button>
  <div id="tipResult"></div>
</div>

<script>
function calculateTip() {
  const billAmount =
parseFloat(document.getElementById('billAmount').value); const
  tipPercentage =
parseFloat(document.getElementById('tipPercentage').value); const
  numPeople =
parseFloat(document.getElementById('numPeople').value);

  if (isNaN(billAmount) || isNaN(tipPercentage) || isNaN(numPeople) || billAmount <=
0 || tipPercentage < 0 || numPeople <= 0) {
document.getElementById('tipResult').textContent = 'Please enter valid inputs';
    return;
  }

  const tipAmount = (billAmount * tipPercentage) / 100;
  const totalAmount = billAmount + tipAmount;
  const tipPerPerson = tipAmount / numPeople;
  const totalPerPerson = totalAmount / numPeople;

```



```
const tipResult = `Tip Amount: ${tipAmount.toFixed(2)}<br> Total Amount  
    (including tip): ${totalAmount.toFixed(2)}<br> Tip per person:  
    ${tipPerPerson.toFixed(2)}<br>  
    Total per person: ${totalPerPerson.toFixed(2)}`;
```

```
document.getElementById('tipResult').innerHTML = tipResult; }  
</script>  
</body>  
</html>
```

