Krishanu Mishra
22IT3020

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');

 change TextBtn.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>
```

Hello

hil

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>

```html
<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++;
```

DD

```
    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**>**

```html
</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>
```

1
;

```javascript
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) +

  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"> <br>`

`<button onclick="calculate("+")">+</button>`

`<button onclick="calculate("-")">-</button>`

`<button onclick="calculate("*")">*</button>`

`<button onclick="calculate("/")">/</button>`
`<p id="result"></p>`

```html
<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>**

```css
<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{
```

```css
    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>

I am an
H1

```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 {
```

```css
}
  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;
```

```css
      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">

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

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

<script>
function calculate Tip()
{
  const billAmount =
parseFloat(document.getElementById('billAmount').value);
  const tipPercentage =
parseFloat(document.getElementById('tipPercentage').value);
  const numPeople =
parseFloat(document.getElementById('num People').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: $${tipAmount.toFixed(2)}**
** Total
  Amount **(**including tip): **$${**totalAmount.toFixed(2)}
 Tip per person:
                $${tipPerPerson.toFixed(2**)}
**

        Total per **person:**
        $${totalPerPerson.toFixed(2)}`;

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

Tip Amount: $250.00
Total Amount (including tip: $5250.00
Tip per person: $25.00
Total per person:
$525,00