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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
hi!

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>`

```html
<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**"**

```html
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');
```

DD

```javascript
  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>
1
;
 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>

```html
</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>


<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,
```

```css
      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;
   }
```

```css
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

Q7. **<!DOCTYPE html**>
<html lang="en"**>**

<head>

```html
<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;
```

```css
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="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: $${tipAmount.toFixed(2)}<br> Total
Amount (including tip): $${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>
```

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