## Name- Prateek

## Roll no.- 22IT3030

```
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>
<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>
0
<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>
```

```
<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"</pre>
```

Q3. <!DOCTYPE html>

```
onclick="incrementCounter()">Increment</button>
<!-- Initial list item -->
 <<li>id="countItem">0
<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>
<thead>
  Row
   Sum
  </thead>
 <!-- Initial rows -->
  1
   1
```

```
2
   1
  <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.previous ElementSibling;
  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>
<but
onclick="calculate("-")">-</button>
<button onclick="calculate("*")">*</button>
<button onclick="calculate("/")">/</button>
<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</pre>
percentage">
 <label for="num People">Number of People:</label>
 <input type="number" id="numPeople" placeholder="Enter number</pre>
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: $${tipAmount.toFixed(2)}<br/>br> Total
  Amount (including tip): $${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
```

Tip Amount: \$250.00

Total Amount (including tip: \$5250.00

Tip per person: \$25.00

Total per person:

\$525,00