

## **WEEK 04 ASSIGNMENT**

**Create an HTML page for the following: -**

- a) Take an input from textbox and find whether it is even or odd, on button click.**
- b) Take an input from textbox and find its factorial on button click.**
- c) Take an input from textbox and print its multiplication table.**

**Extracts a number between 0 and 999 from a text field and displays it in words.**

```

<> assignment6.html > html > head > style > .output
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Number Operations</title>
7      <style>
8          body {
9              font-family: Arial, sans-serif;
10             padding: 20px;
11             background-color: rgb(175, 210, 210);
12         }
13         input, button {
14             padding: 8px;
15             margin: 10px;
16             font-size: 16px;
17             background-color: bisque;
18         }
19         .output {
20             margin-top: 20px;
21             font-weight: bold;
22         }
23         body{
24             background-color: darkcyan;
25         }
26     </style>
27 </head>
28 <body>
29
30 <h1>Number Operations</h1>
31
32
33 <div>
34     <label for="number">Enter a number (0 - 999): </label>
35     <input type="number" id="number" min="0" max="999" />
36 </div>
37
38 <button onclick="checkEvenOdd()">Check Even or Odd</button>
39 <div id="evenOddResult" class="output"></div>
40
41 <button onclick="calculateFactorial()">Calculate Factorial</button>
42 <div id="factorialResult" class="output"></div>
43

```

```
assignment6.html > head > style > .output
2   <html lang="en">
28  <body>
40
41  <button onclick="calculateFactorial()">Calculate Factorial</button>
42  <div id="factorialResult" class="output"></div>
43
44  <button onclick="generateMultiplicationTable()">Generate Multiplication Table</button>
45  <div id="multiplicationTableResult" class="output"></div>
46
47  <button onclick="convertToWords()">Convert to Words</button>
48  <div id="numberInWords" class="output"></div>
49
50  <script>
51
52      function checkEvenOdd() {
53          const num = parseInt(document.getElementById('number').value);
54          const resultDiv = document.getElementById('evenOddResult');
55
56          if (isNaN(num)) {
57              resultDiv.innerHTML = 'Please enter a valid number.';
58              return;
59          }
60
61          if (num % 2 === 0) {
62              resultDiv.innerHTML = num + ' is Even';
63          } else {
64              resultDiv.innerHTML = num + ' is Odd';
65          }
66      }
67
68
69      function calculateFactorial() {
70          const num = parseInt(document.getElementById('number').value);
71          const resultDiv = document.getElementById('factorialResult');
72
73          if (isNaN(num) || num < 0) {
74              resultDiv.innerHTML = 'Please enter a valid number greater than or equal to 0.';
75              return;
76          }
77
78          let factorial = 1;
79          for (let i = 1; i <= num; i++) {
80              factorial *= i;
81          }
82      }
83  </script>
84</body>
85</html>
```

```
<> assignment6.html > html > head > style > .output
2   <html lang="en">
28  <body>
50  <script>
69      function calculateFactorial() {
75          return;
76      }
77
78      let factorial = 1;
79      for (let i = 1; i <= num; i++) {
80          factorial *= i;
81      }
82
83      resultDiv.innerHTML = 'Factorial of ' + num + ' is ' + factorial;
84  }
85
86
87  function generateMultiplicationTable() {
88      const num = parseInt(document.getElementById('number').value);
89      const resultDiv = document.getElementById('multiplicationTableResult');
90
91      if (isNaN(num)) {
92          resultDiv.innerHTML = 'Please enter a valid number.';
93          return;
94      }
95
96      let table = '<h3>Multiplication Table of ' + num + '</h3><ul>';
97      for (let i = 1; i <= 10; i++) {
98          table += '<li>' + num + ' x ' + i + ' = ' + (num * i) + '</li>';
99      }
100     table += '</ul>';
101
102     resultDiv.innerHTML = table;
103 }
104
105 function convertToWords() {
106     const num = parseInt(document.getElementById('number').value);
107     const resultDiv = document.getElementById('numberInWords');
108
109     if (isNaN(num) || num < 0 || num > 999) {
110         resultDiv.innerHTML = 'Please enter a valid number between 0 and 999.';
111         return;
112     }
113
114     resultDiv.innerHTML = numberToWords(num);
```

```
> assignment6.html > html > head > style > .output
2   <html lang="en">
28  <body>
50  <script>
05    function convertToWords() {
12      }
13
14      resultDiv.innerHTML = numberToWords(num);
15    }
16
17
18    function numberToWords(num) {
19      const ones = ["", "One", "Two", "Three", "Four", "Five", "Six", "Seven", "Eight", "Nine"];
20      const teens = ["Ten", "Eleven", "Twelve", "Thirteen", "Fourteen", "Fifteen", "Sixteen", "Seventeen"];
21      const tens = ["", "", "Twenty", "Thirty", "Forty", "Fifty", "Sixty", "Seventy", "Eighty", "Ninety"];
22
23      if (num === 0) return "Zero";
24
25      let words = "";
26
27      if (num >= 100) {
28        words += ones[Math.floor(num / 100)] + " Hundred ";
29        num %= 100;
30      }
31
32      if (num >= 20) {
33        words += tens[Math.floor(num / 10)] + " ";
34        num %= 10;
35      }
36
37      if (num >= 10) {
38        words += teens[num - 10] + " ";
39      } else if (num > 0) {
40        words += ones[num] + " ";
41      }
42
43      return words.trim();
44    }
45  </script>
46
47  </body>
48  </html>
```

# Number Operations

Enter a number (0 - 999):

6

Check Even or Odd

**6 is Even**

Calculate Factorial

**Factorial of 6 is 720**

Generate Multiplication Table

## Multiplication Table of 6

- $6 \times 1 = 6$
- $6 \times 2 = 12$
- $6 \times 3 = 18$
- $6 \times 4 = 24$
- $6 \times 5 = 30$
- $6 \times 6 = 36$
- $6 \times 7 = 42$
- $6 \times 8 = 48$
- $6 \times 9 = 54$
- $6 \times 10 = 60$

Convert to Words

**Six**