

```
1 <!-- PRACTICAL-7: Take input from user through prompt box and store it in an array. Calculate the Factorial of each
2 number present in the array using iterative method of array and generate the resultant array of factorial values. [Bonus
3 Program: Create the same program combining the iterative methods concept and recursion.]
4
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8
9 <!-- CODE -->
10
11 <!DOCTYPE html>
12 <html lang="en">
13 <head>
14 <meta charset="UTF-8">
15 <meta name="viewport" content="width=device-width, initial-scale=1.0">
16 <title>PRACTICAL7</title>
17 </head>
18 <body>
19 <div id="display"></div>
20
21 <script>
22     function calculateFactorialIterative(number) {
23         let factorial = 1;
24         for (let i = 1; i <= number; i++) {
25             factorial *= i;
26         }
27         return factorial;
28     }
29
30     function calculateFactorialRecursive(number) {
31         if (number <= 1) {
32             return 1;
33         }
34         return number * calculateFactorialRecursive(number - 1);
35     }
36
37     const userInput = prompt("Enter numbers separated by commas: ");
38     const inputArray = userInput.split(',').map(Number);
39
40     const factorialArrayIterative = inputArray.map(number => calculateFactorialIterative(number));
41     const factorialArrayRecursive = inputArray.map(number => calculateFactorialRecursive(number));
42
43     const display = document.getElementById("display");
44     display.innerHTML += `<p>Inputed Array --> [${inputArray.join(', ')}]</p>`;
45     display.innerHTML += `<p>Factorial Array By Iterative Method --> [${factorialArrayIterative.join(', ')}]</p>`;
46     display.innerHTML += `<p>Factorial Array By Recursive Method --> [${factorialArrayRecursive.join(', ')}]
47 </p>`;
48 </script>
49 </body>
50 </html>
51
52 <!-- ***-***-***-END OF PRACTICAL 7-***-***-***- -->
```