Create a simple calculator by using JavaScript, that takes two numbers from the user and performs basic arithmetic operations (addition, subtraction, multiplication, and division). Use prompt() to get input from the user and alert() to display the result.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Simple Calculator</title>
</head>
<body>
  <h1>Simple Calculator</h1>
  <script>
    // Taking input from the user
    let num1 = parseFloat(prompt("Enter the first number:"));
    let num2 = parseFloat(prompt("Enter the second number:"));
    // Taking the operation choice
    let operation = prompt("Enter the operation (+, -, *, /):");
    // Conditional statements to perform the operation
    let result;
    if (operation === "+") {
       result = num1 + num2;
     } else if (operation === "-") {
       result = num1 - num2;
     } else if (operation === "*") {
       result = num1 * num2;
     } else if (operation === "/") {
       result = num1 / num2;
     } else {
       result = "Invalid operation!";
    // Display the result using alert
    alert("The result is: " + result);
  </script>
</body>
</html>
```

<u>Practical – 2</u>

Create an array of numbers by using JavaScript and calculate the sum of all the elements in the array using a for loop. Display the sum in the browser using document.write().

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Sum of Array</title>
</head>
<body>
  <h1>Sum of Array Elements</h1>
  <script>
    // Declare an array of numbers
    let numbers = [5, 10, 15, 20, 25];
    // Variable to store the sum
    let sum = 0;
    // Loop through the array and add each element to the sum
    for (let i = 0; i < numbers.length; i++) {
       sum += numbers[i];
     }
    // Display the result in the browser
    document.write("The sum of the array elements is: " + sum);
  </script>
</body>
</html>
```

Create a function in JavaScript, that takes a number as input and checks if the number is even or odd. Use prompt() to get the user input and alert() to display whether the number is even or odd.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Even or Odd Checker</title>
</head>
<body>
  <h1>Even or Odd Number Checker</h1>
    // Function to check if a number is even or odd
    function checkEvenOdd() {
       let number = parseInt(prompt("Enter a number:"));
       // Check if the number is even or odd using modulo operator
       if (number \% 2 === 0) {
         alert(number + " is an Even number.");
         alert(number + " is an Odd number.");
       }
    }
    // Call the function to execute
    checkEvenOdd();
  </script>
</body>
</html>
```

Write a JavaScript function that reverses a string entered by the user. Use prompt() to get the string input and display the reversed string in the browser using document.write()

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Reverse String</title>
</head>
<body>
  <h1>String Reversal</h1>
  <script>
    // Function to reverse a string
    function reverseString(str) {
       return str.split(").reverse().join(");
     }
    // Get the string input from the user
    let userInput = prompt("Enter a string to reverse:");
    // Reverse the string and display it
    let reversed = reverseString(userInput);
    document.write("Original String: " + userInput + "<br>");
    document.write("Reversed String: " + reversed);
  </script>
</body>
</html>
```

Write a program in Java Script which should prompt the user to enter the result of Question-What is the result of 10+10? II. The user will be given a chance to answer the question. If the answer is correct then the program should raise a message-—Congratulations II. If the answer is wrong then the program should again ask the same question. If the answer is correct then the message should be ——Cleared in the second round II else another message should be generated specifying —— Sorry, try next time II and the program should exit. Note — Make use of If. Else.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Quiz Program</title>
  <script>
    function askQuestion()
       // First attempt
       let answer = prompt("What is the result of 10 + 10?");
       if (answer == "20") {
         alert("Congratulations!");
         return;
       else
         // Second attempt
         answer = prompt("Wrong answer! Try again: What is the result of 10 + 10?");
         if (answer == "20")
            alert("Cleared in the second round!");
         else
            alert("Sorry, try next time.");
  </script>
</head>
<br/><body onload="askQuestion()">
  <h1>JavaScript Quiz</h1>
  Check the prompt to answer the quiz question!
</body>
</html>
```

Write a program in Java Script which raises a Message: —Welcome To Our Website as soon as the Site is loaded. It should also display a message: —Thank You — when the user switch over from the page.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Welcome and Thank You</title>
  <script>
    // Display a welcome message when the site loads
    window.onload = function() {
      alert("Welcome To Our Website");
    };
    // Display a thank-you message when the user switches or closes the page
    window.onbeforeunload = function() {
      return "Thank You for visiting!";
    };
  </script>
</head>
<body>
  <h1>Welcome to Our Website</h1>
  Feel free to explore the content!
</body>
</html>
```