SEC PRACTICAL 11 TO 20

11.Write a javascript to print the sum of n numbers

12.Write a javascript to check whether a character is vowel or consonant

```
<!DOCTYPE html>
<html>

<head>
    <title>Vowel or Consonant Checker</title>
</head>

<body>
    <h1>Vowel or Consonant Checker</h1>

    <script>
        const character = prompt('Enter a character:');

        const vowels = 'aeiouAEIOU';
        const isVowel = vowels.includes(character);

        if (isVowel) {
            alert(`${character} is a vowel.`);
        } else {
            alert(`${character} is a consonant.`);
        }
    </script>
</body>

</html>
```

13.Write a javascript to check whether a number is prime number or not

```
<!DOCTYPE html>
<html>
<head>
    <title>Prime Number Checker</title>
</head>
<body>
    <h1>Check Prime Number</h1>
    <label for="Inputprime">Enter a number:</label>
    <input type="primenumber" id="Inputprime" placeholder="Enter number">
    <button onclick="checkPrimeNumber()">Check</button>
    <p id="answer"></p>

    <script>
        function checkPrimeNumber() {
```

```
        var number =document.getElementById("Inputprime").value;

        if (isNaN(number) || number <= 1) {
            document.getElementById("answer").innerHTML = "Please enter a valid number
greater than 1.";
            return;
        }

        for (let i = 2; i <= Math.sqrt(number); i++) {
            if (number % i === 0) {
                document.getElementById("answer").innerHTML = `${number} is not a prime
number.`;
                return;
            }
        }

        document.getElementById("answer").innerHTML = `${number} is a prime number!`;
    }
  </script>
</body>
</html>
```

14.Write a javascript to print the Fibonacci series

```
<!DOCTYPE html>
<html>
<head>
  <title>Fibonacci Series</title>
</head>
<body>
  <h1>Fibonacci Series</h1>
  <div>No. Of Terms:</div>
  <input type="number" id="num" min="1" value="10">
  <button onclick="generateFibonacci()">Generate</button>
  <p id="answer"></p>

  <script>
    function generateFibonacci() {
        var num = parseInt(document.getElementById("num").value);
        var answer = document.getElementById("answer");
        let num1 = 0, num2 = 1, nextTerm;
        let series = "Fibonacci Series:<br>";

        for (let i = 1; i <= num; i++) {
            series += num1 + "<br>";
            nextTerm = num1 + num2;
            num1 = num2;
            num2 = nextTerm;
```

```
        }

        answer.innerHTML = series;
    }
  </script>
</body>
</html>
```

15.Write a javascript to print prime numbers between 1 and 100..

```
<!DOCTYPE html>
<html>
<head>
  <title>Prime Numbers from 1 to 100</title>
</head>
<body>
  <h1>Prime Numbers from 1 to 100</h1>
  <div id="numbers"></div>
  <script>
    let numbersDiv = document.getElementById("numbers");

    function isPrime(num) {
        for (let i = 2; i < num; i++) {
            if (num % i === 0) {
                return false;
            }
        }
        return num > 1;
    }

    for (let i = 2; i <= 100; i++) {
        if (isPrime(i)) {
             numbersDiv.innerHTML += i + "<br>";
        }
    }
  </script>
</body>
</html>
```

16.Write a javascript to print even numbers between 1 and 100

```
<!DOCTYPE html>
<html>
<head>
  <title>Even numbers from 1 to 100</title>
</head>
<body>
  <h1>Even numbers from 1 to 100</h1>
  <div id="numbers"></div>
```

```
    <script>
        let numbersDiv = document.getElementById("numbers");
        for (let i = 2; i <= 100; i+=2) {
            numbersDiv.innerHTML += i +  "<br>";
        }
    </script>
</body>
</html>
```

17.Write a javascript to print odd numbers between 1 and 100

```
<!DOCTYPE html>
<html>
<head>
    <title>Odd numbers from 1 to 100</title>
</head>
<body>
    <h1>Odd numbers from 1 to 100</h1>
    <div id="numbers"></div>
    <script>
        let numbersDiv = document.getElementById("numbers");
        for (let i = 1; i <= 100; i+=2) {
            numbersDiv.innerHTML += i +  "<br>";
        }
    </script>
</body>
</html>
```

18.Write a javascript to print leap years between 2021 and 2030

```
<!DOCTYPE html>
<html>
<head>
    <title>leap years between 2021 and 2030</title>
</head>
<body>
    <h1>leap years between 2021 and 2030</h1>
    <div id="leapyears"></div>
    <script>
        let leapyearsDiv = document.getElementById("leapyears");
        for (var year = 2021; year <= 2030; year++) {
            if ((year % 4 === 0 && year % 100 !== 0) || (year % 400 === 0)) {
                leapyearsDiv.innerHTML += year + "<br>";
            }
        }
    </script>
</body>
</html>
```

19.Write a javascript to validate a mobile number

```
<!DOCTYPE html>
<html>
<head>
   <title>Mobile Number Validation</title>
</head>
<body>
   <h1>Mobile Number Validation</h1>
   <label for="number">Enter your mobile number:</label>
   <input type="text" id="number" placeholder="eg:1234567890">
   <button onclick="validateMobileNumber()">Validate</button>
   <p id="answer"></p>

   <script>
      function validateMobileNumber() {
         var number = document.getElementById("number").value;
         var num = /^[0-9]{10}$/;

         if (num.test(number)) {
            document.getElementById("answer").innerHTML = "Valid mobile number!";
         } else {
            document.getElementById("answer").innerHTML = "Invalid mobile number";
         }
      }
   </script>
</body>
</html>
```

20.Write a javascript to validate an email id.

```
<!DOCTYPE html>
<html>
<head>
   <title>Email Validation</title>
</head>
<body>
   <h1>Email Validation</h1>
   <label for="email">Enter your email id:</label>
   <input type="text" id="email" placeholder="eg.abx@gmail.com">
   <button onclick="validateEmail()">Validate</button>
   <p id="answer"></p>

   <script>
      function validateEmail() {
         var email = document.getElementById("email").value;
         var isValid = /^[^\s@]+@[^\s@]+\.[^\s@]+$/.test(email);
```

```
            document.getElementById("answer").innerHTML = isValid ? "Valid email address!" :
"Invalid email address,Enter a valid email.";
        }
    </script>
</body>
</html>
```