Q1 sum of array

```
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8" />
   <meta name="viewport" content="width=device-width, initial-</pre>
scale=1.0" />
    <title>Document</title>
   <style>
        font-style: italic;
       background-color: rgb(142, 132, 120);
    </style>
    <h1>Enter the size of the array</h1>
    <input id="size" type="text" placeholder="Number of elements" />
    <button onclick="sum()">Click for sum</button>
    <div id="ans"></div>
      function sum() {
        const sizeInput = document.getElementById("size").value;
        const size = parseInt(sizeInput);
        if (isNaN(size) | size <= 0) {</pre>
          alert("Please enter a valid positive number for the size.");
          return;
        const arr = [];
        for (let i = 0; i < size; i++) {</pre>
          const element = prompt("Enter element " + (i + 1) + ":");
          const num = parseFloat(element);
          if (isNaN(num)) {
            alert("Invalid input. Please enter a valid number.");
            return;
          arr.push(num);
```

```
let sum = 0;
    for (let i = 0; i < arr.length; i++) {
        sum += arr[i];
    }

    const elem = document.getElementById("ans");
    elem.innerHTML = "Sum: " + sum;
    }
    </script>
    </body>
</html>
```

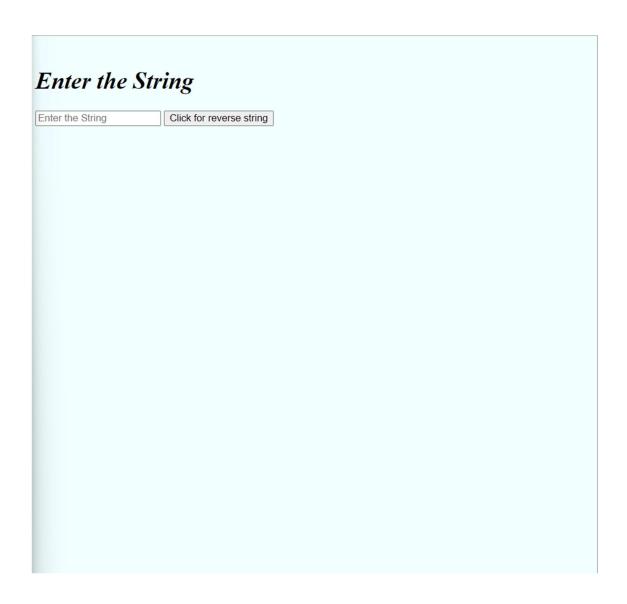
Enter the size of the array

Number of elements

Click for sum

Q2 Reverse the string

```
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8" />
   <meta name="viewport" content="width=device-width, initial-</pre>
    <title>Document</title>
   <style>
       background-color: azure;
       font-style: italic;
       padding-top: 20px;
  <h1>Enter the String</h1>
  <script>
   function rev() {
      const str = document.getElementById("data").value;
      const len = str.length;
      let ans = "";
      for (let i = len - 1; i >= 0; i--) {
       ans += str[i];
      const elem = document.getElementById("ans");
      elem.innerHTML = "Reversed string: " + ans;
 </script>
    <input id="data" type="text" placeholder="Enter the String" />
   <button onclick="rev()">Click for reverse string/button>
   <div id="ans"></div>
 </body>
```



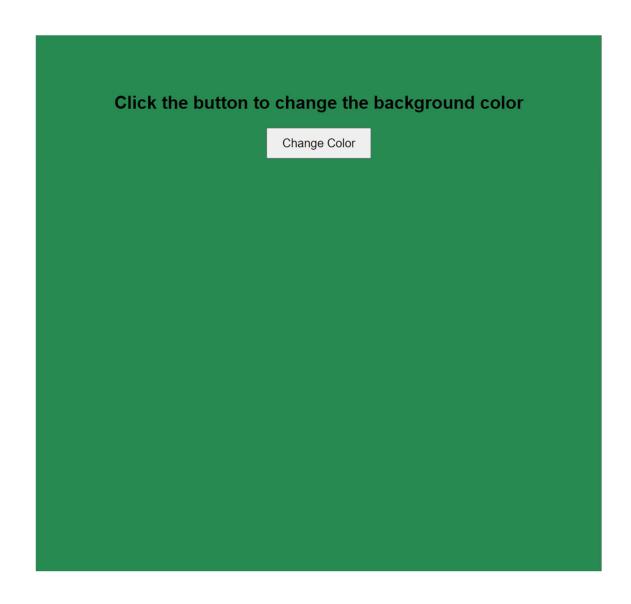
Q3 Prime Number

Enter the Number

Enter the number Click for prime numbers

Q4 Background Colour

```
padding-top: 50px;
}
button {
    padding: 10px 20px;
    font-size: 16px;
}
</style>
</head>
</body>
</h2>
</br/>
</br/>
</br/>
</script>
function changeColor() {
    var red = Math.floor(Math.random() * 256);
    var green = Math.floor(Math.random() * 256);
    var color = "rgb(" + red + ", " + green + ", " + blue + ")";
    document.body.style.backgroundColor = color;
}
</script>
</body>
</html>
```



Q5 AGE group checker

```
<label for="ageInput">Enter your age:</label>
<input type="text" id="ageInput" placeholder="Enter your age" />
<button onclick="checktheAge()">Check Age Group</button>
<script>
  function checktheAge() {
    const ageInput = document.getElementById("ageInput").value;
    const age = parseInt(ageInput);
    if (isNaN(age)) {
      document.getElementById("result").innerText =
        "Please enter a valid age.";
      return;
    let ageGroup;
      ageGroup = "Child";
    } else if (age >= 13 && age <= 19) {
      ageGroup = "Teenage";
      ageGroup = "Senior citizen";
      "Your age group is: " + ageGroup;
```

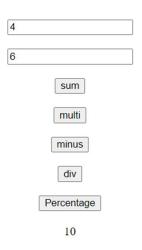
Enter the age Enter your age: 56 Check Age Group Your age group is: Senior citizen

Q6 Calculator

```
elem.innerHTML=parseInt(a)+parseInt(b);
   function multi(){
       const a=document.getElementById("first").value;
       const b=document.getElementById("second").value;
       const elem=document.getElementById("finalsum");
       elem.innerHTML=parseInt(a)*parseInt(b);
   function minus(){
       const a=document.getElementById("first").value;
       const b=document.getElementById("second").value;
       const elem=document.getElementById("finalsum");
       elem.innerHTML=parseInt(a)-parseInt(b);
   function div(){
       const a=document.getElementById("first").value;
       const b=document.getElementById("second").value;
       const elem=document.getElementById("finalsum");
       elem.innerHTML=parseInt(a)/parseInt(b);
   function per(){
   const a=document.getElementById("first").value;
   const b=document.getElementById("second").value;
   const elem=document.getElementById("finalsum");
   elem.innerHTML=parseInt(a)/parseInt(b)*100;
</script>
       <h2 id="ghead" ><u>Simple Calculator</u></h2><br></br></pr>
   <input id="first" type="text" placeholder="first num">
   <br></br>
   <input id="second" type="text" placeholder="second"><br></br></pr>
   <button onclick="sum()">sum</button><br></br>
   <button onclick="multi()">multi/br>
   <button onclick="minus()">minus</putton><br></br>
   <button onclick="div()">div</button><br></br>
   <button onclick="per()">Percentage</button><br></br></pr>
   <div id= "finalsum">
```



Simple Calculator



Q7 Student Grade Calculator

```
font-family: Arial, sans-serif;
       font-style: italic;
       text-align: center;
       padding-top: 50px;
       background-color: rgb(226, 181, 127);
     form {
       margin-bottom: 20px;
       color: rgb(104, 14, 14);
       font-style: italic;
    </style>
    <h2>Student Grade Calculator</h2>
   <form id="gradeForm">
     <label for="name">Student Name:</label>
     <input type="text" id="name" required /><br /><br />
     <label for="subject1">English:</label>
      <input type="number" id="subject1" required /><br /><br />
     <label for="subject2">Computer Science:</label>
      <input type="number" id="subject2" required /><br /><br />
     <label for="subject3">Math:</label>
      <input type="number" id="subject3" required /><br /><br />
     <label for="subject4">Social Science:</label>
      <input type="number" id="subject4" required /><br /><br />
     <label for="subject5">Hindi:</label>
      <input type="number" id="subject5" required /><br /><br />
      <button type="button" onclick="calculateGrade()">Calculate
Grade
   </form>
    <div id="result"></div>
    <script>
     function calculateGrade() {
```

```
var name = document.getElementById("name").value;
        var subject1 =
parseFloat(document.getElementById("subject1").value);
        var subject2 =
parseFloat(document.getElementById("subject2").value);
        var subject3 =
parseFloat(document.getElementById("subject3").value);
        var subject4 =
parseFloat(document.getElementById("subject4").value);
        var subject5 =
parseFloat(document.getElementById("subject5").value);
        var totalMarks = subject1 + subject2 + subject3 + subject4 +
        var avgmarks = totalMarks / 5;
        var grade;
         grade = "A+";
         grade = "B";
         grade = "C";
         grade = "D";
          grade = "F";
        var result = "Student Name: " + name + "<br>";
        result += "Total Marks: " + totalMarks + "<br>";
        result += "Average Marks: " + avgmarks.toFixed(2) + "<br>";
        document.getElementById("result").innerHTML = result;
    </script>
```

Student Grade Calculator

Student Name: Satyendra Singh

English: 94

Computer Science: 91

Math: 87

Social Science: 95

Hindi: 85

Calculate Grade

Student Name: Satyendra Singh Total Marks: 452 Average Marks: 90.40 Grade: A+