

Q1 sum of array

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-
scale=1.0" />
    <title>Document</title>
    <style>
      h1 {
        font-style: italic;
      }
      body {
        background-color: rgb(142, 132, 120);
      }
    </style>
  </head>
  <body>
    <h1>Enter the size of the array</h1>
    <br />
    <input id="size" type="text" placeholder="Number of elements" />
    <button onclick="sum()">Click for sum</button>
    <div id="ans"></div>
    <br />

    <script>
      function sum() {
        const sizeInput = document.getElementById("size").value;
        const size = parseInt(sizeInput);
        if (isNaN(size) || size <= 0) {
          alert("Please enter a valid positive number for the size.");
          return;
        }

        const arr = [];
        for (let i = 0; i < size; i++) {
          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);
        }
      }
    </script>
  </body>
</html>
```

```
    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">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-
scale=1.0" />
    <title>Document</title>
    <style>
      body {
        background-color: azure;
        font-style: italic;
      }
      h1 {
        padding-top: 20px;
      }
    </style>
  </head>
  <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>
  <body>
    <input id="data" type="text" placeholder="Enter the String" />
    <button onclick="rev()">Click for reverse string</button>
    <div id="ans"></div>
  </body>
</html>
```

Enter the String

Q3 Prime Number

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-
scale=1.0" />
    <title>Document</title>
  </head>
  <script>
    function prim() {
      const a = parseInt(document.getElementById("data").value);
      let s = "";
```

```
    for (let i = 2; i < a; i++) {
      let flag = 0;
      for (let j = 1; j <= i; j++) {
        if (i % j == 0) {
          flag++;
        }
      }
      if (flag == 2) {
        s += i + " ";
      }
    }
    const elem = document.getElementById("ans1");
    elem.innerHTML = "Prime numbers are: " + s;
  }
</script>
<body>
  <h1>Enter the Number</h1>
  <br />
  <input id="data" type="text" placeholder="Enter the number" />
  <button onclick="prim()">Click for prime numbers</button>
  <div id="ans1"></div>
</body>
</html>
```

Enter the Number

Q4 Background Colour

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-
scale=1.0" />
    <title>Change Background Color</title>
    <style>
      body {
        font-family: Arial, sans-serif;
        text-align: center;
```

```
        padding-top: 50px;
    }
    button {
        padding: 10px 20px;
        font-size: 16px;
    }
</style>
</head>
<body>
    <h2>Click the button to change the background color</h2>
    <button onclick="changeColor()">Change Color</button>

    <script>
        function changeColor() {
            var red = Math.floor(Math.random() * 256);
            var green = Math.floor(Math.random() * 256);
            var blue = Math.floor(Math.random() * 256);

            var color = "rgb(" + red + ", " + green + ", " + blue + ")";
            document.body.style.backgroundColor = color;
        }
    </script>
</body>
</html>
```

Click the button to change the background color

Change Color

Q5 AGE group checker

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-
scale=1.0" />
    <title>Age Group Checker</title>
    <style>
      body {
        background-color: blanchedalmond;
      }
    </style>
```



```
</head>
<body>
  <h1>Enter the age</h1>
  <label for="ageInput">Enter your age:</label>
  <input type="text" id="ageInput" placeholder="Enter your age" />
  <button onclick="checktheAge()">Check Age Group</button>
  <div id="result"></div>

  <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;
      if (age >= 0 && age <= 12) {
        ageGroup = "Child";
      } else if (age >= 13 && age <= 19) {
        ageGroup = "Teenage";
      } else if (age >= 20 && age <= 40) {
        ageGroup = "Young";
      } else {
        ageGroup = "Senior citizen";
      }

      document.getElementById("result").innerText =
        "Your age group is: " + ageGroup;
    }
  </script>
</body>
</html>
```

Enter the age

Enter your age:

Your age group is: Senior citizen

Q6 Calculator

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-
scale=1.0" />
    <title>Calculator</title>
  </head>
  <script>
    function sum(){
      const a=document.getElementById("first").value;
      const b=document.getElementById("second").value;
      const elem=document.getElementById("finalsum");
```

```

        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>
<body>
    <center>
        <h2 id="ghead" ><u>Simple Calculator</u></h2><br></br>
        <input id="first" type="text" placeholder="first num">
        <br></br>
        <input id="second" type="text" placeholder="second"><br></br>
        <button onclick="sum()">sum</button><br></br>
        <button onclick="multi()">multi</button><br></br>
        <button onclick="minus()">minus</button><br></br>
        <button onclick="div()">div</button><br></br>
        <button onclick="per()">Percentage</button><br></br>
        <div id= "finalsum">
    </div>

    </center>
<br>

```

```
</body>  
</html>
```

Simple Calculator

10

Q7 Student Grade Calculator

```
<!DOCTYPE html>  
<html lang="en">  
  <head>  
    <meta charset="UTF-8" />  
    <meta name="viewport" content="width=device-width, initial-  
scale=1.0" />  
    <title>Student Grade Calculator</title>
```

```
<style>
  body {
    font-family: Arial, sans-serif;
    font-style: italic;
    text-align: center;
    padding-top: 50px;
    background-color: rgb(226, 181, 127);
  }
  form {
    margin-bottom: 20px;
  }
  label {
    color: rgb(104, 14, 14);
    font-style: italic;
  }
</style>
</head>
<body>
  <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</button>
  </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 +
subject5;
        var avgmarks = totalMarks / 5;

        var grade;
        if (avgmarks >= 90) {
            grade = "A+";
        } else if (avgmarks >= 80) {
            grade = "A";
        } else if (avgmarks >= 70) {
            grade = "B";
        } else if (avgmarks >= 60) {
            grade = "C";
        } else if (avgmarks >= 50) {
            grade = "D";
        } else {
            grade = "F";
        }

        var result = "Student Name: " + name + "<br>";
        result += "Total Marks: " + totalMarks + "<br>";
        result += "Average Marks: " + avgmarks.toFixed(2) + "<br>";
        result += "Grade: " + grade;

        document.getElementById("result").innerHTML = result;
    }
</script>
</body>
</html>
```

Student Grade Calculator

Student Name:

English:

Computer Science:

Math:

Social Science:

Hindi:

Student Name: Satyendra Singh

Total Marks: 452

Average Marks: 90.40

Grade: A+