

## 1.Simple Calculator :

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Simple Calculator</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background: #000000;
      padding: 30px;
    }

    .calculator {
      background: #fff9f9;
      /* background: linear-gradient(to left, #ff5151, #ffffff); */
      padding: 20px 30px;
      border-radius: 10px;
      max-width: 400px;
      margin: auto;
      box-shadow: 0 0 10px rgba(0,0,0,0.1);
    }

    h2 {
      text-align: center;
      margin-bottom: 20px;
    }

    label {
      display: block;
      margin: 10px 0 5px;
      font-weight: bold;
    }

    input[type="number"], select {
      width: 100%;
      padding: 8px;
      margin-bottom: 15px;
    }
```

```
border: 1px solid #ccc;
border-radius: 5px;
}

.buttons {
  display: flex;
  justify-content: space-between;
  align-items: center;
}

.buttons img {
  width: 60px;
  cursor: pointer;
}

.result {
  margin-top: 20px;
  text-align: center;
  font-weight: bold;
}
</style>
</head>
<body>

<div class="calculator">
  <h2>Simple Calculator</h2>

  <label for="input1">Input1</label>
  <input type="number" id="input1" name="input1" placeholder="Enter first
number">

  <label for="input2">Input2</label>
  <input type="number" id="input2" name="input2" placeholder="Enter second
number">

  <label for="operation">Select Operation</label>
  <select id="operation" name="operation">
    <option value="">Select</option>
    <option value="ADD">ADD</option>
    <option value="SUBTRACT">SUBTRACT</option>
```

```
<option value="MULTIPLY">MULTIPLY</option>
<option value="DIVIDE">DIVIDE</option>
</select>

<div class="buttons">
  
  
</div>

<div class="result" id="result"></div>
</div>

<script>
function calculate() {
  const input1 = parseFloat(document.getElementById('input1').value);
  const input2 = parseFloat(document.getElementById('input2').value);
  const operation = document.getElementById('operation').value;
  const resultEl = document.getElementById('result');

  if (isNaN(input1) || isNaN(input2)) {
    resultEl.textContent = 'Please enter valid numbers.';
    return;
  }

  let result;

  switch (operation) {
    case 'ADD':
      result = input1 + input2;
      break;
    case 'SUBTRACT':
      result = input1 - input2;
      break;
    case 'MULTIPLY':
      result = input1 * input2;
      break;
    case 'DIVIDE':
      if (input2 === 0) {
```

```
        resultEl.textContent = 'Cannot divide by zero!';
        return;
    }
    result = input1 / input2;
    break;
default:
    resultEl.textContent = 'Please select a valid operation.';
    return;
}

resultEl.textContent = `Result: ${result}`;
}

function resetForm() {
    document.getElementById('input1').value = '';
    document.getElementById('input2').value = '';
    document.getElementById('operation').value = '';
    document.getElementById('result').textContent = '';
}
</script>

</body>
</html>
```

Output:



### Simple Calculator

**Input1**

**Input2**

**Select Operation**  

SUBTRACT



**Result: 70**

## 2. Player Application Form Validation :

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Player Details</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background-color: #f0f8ff;
    }
    .container {
      width: 500px;
      margin: 40px auto;
      border: 2px solid #0a4c8a;
      background-color: #add8e6;
    }
    .header {
      background-color: #1e4f7b;
      color: white;
      padding: 10px;
      text-align: center;
      font-size: 24px;
      font-weight: bold;
    }
    form {
      padding: 20px;
    }
    label {
      display: block;
      margin-top: 10px;
      font-weight: bold;
    }
    .required::after {
      content: "*";
      color: red;
    }
    input[type="text"],
    input[type="email"],
```

```
input[type="date"],
select,
textarea {
  width: 100%;
  padding: 6px;
  margin-top: 5px;
  box-sizing: border-box;
}
input[type="radio"],
input[type="checkbox"] {
  margin-right: 5px;
}
textarea {
  height: 60px;
}
.button-group {
  text-align: center;
  padding: 20px;
  background-color: #1e4f7b;
}
.button-group input {
  padding: 8px 20px;
  margin: 0 10px;
  font-size: 16px;
  background-color: white;
  border: none;
  border-radius: 4px;
  cursor: pointer;
}
.button-group input:hover {
  background-color: #ddd;
}
</style>
</head>
<body>

<div class="container">
  <div class="header">Player Details</div>
  <form id="playerForm" onsubmit="return validateForm()">
    <label class="required">Name</label>
```

```
<input type="text" id="name" placeholder="Enter your name" required>

<label class="required">DOB</label>
<input type="text" id="dob" placeholder="DD/MM/YYYY" required>

<label class="required">Age</label>
<input type="text" id="age" placeholder="Enter your age" required>

<label class="required">Email Id</label>
<input type="email" id="email" placeholder="abc12@xyz.com" required>

<label class="required">Country</label>
<select id="country" required>
  <option value="">Select Country</option>
  <option>India</option>
  <option>Australia</option>
  <option>South Africa</option>
  <option>England</option>
</select>

<label class="required">Skill</label>
<input type="checkbox" name="skill" value="Batting">Batting
<input type="checkbox" name="skill" value="Bowling">Bowling

<label>Bat Style</label>
<input type="radio" name="batStyle" value="Right Handed">Right Handed
<input type="radio" name="batStyle" value="Left Handed">Left Handed

<label>Bowl Style</label>
<input type="radio" name="bowlStyle" value="Right Handed">Right Handed
<input type="radio" name="bowlStyle" value="Left Handed">Left Handed

<label class="required">Matches</label>
<input type="text" id="matches" placeholder="Matches Played" required>

<label class="required">Runs</label>
<input type="text" id="runs" placeholder="Total runs scored" required>

<label class="required">Wickets</label>
<input type="text" id="wickets" placeholder="Wickets" required>
```



```
<label>Achievements</label>
<textarea placeholder="Your Achievements in Cricket"
id="achievements"></textarea>

<div class="button-group">
  <input type="submit" value="Submit">
  <input type="reset" value="Reset">
</div>
</form>
</div>

<script>
function validateForm() {
  const name = document.getElementById('name').value.trim();
  const dob = document.getElementById('dob').value.trim();
  const age = document.getElementById('age').value.trim();
  const email = document.getElementById('email').value.trim();
  const country = document.getElementById('country').value;
  const matches = document.getElementById('matches').value.trim();
  const runs = document.getElementById('runs').value.trim();
  const wickets = document.getElementById('wickets').value.trim();

  const skills =
document.querySelectorAll('input[name="skill"]:checked');

  // Name - only alphabets
  if (!/^[A-Za-z\s]+$/i.test(name)) {
    alert("Name must contain alphabets only.");
    return false;
  }

  // Email format
  const emailPattern = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;
  if (!emailPattern.test(email)) {
    alert("Please enter a valid email address.");
    return false;
  }

  // Check numbers
```

```
if (isNaN(age) || age <= 0) {
    alert("Age must be a valid number.");
    return false;
}

if (isNaN(matches) || matches < 0) {
    alert("Matches must be a valid number.");
    return false;
}

if (isNaN(runs) || runs < 0) {
    alert("Runs must be a valid number.");
    return false;
}

if (isNaN(wickets) || wickets < 0) {
    alert("Wickets must be a valid number.");
    return false;
}

// Ensure country selected
if (country === "") {
    alert("Please select a country.");
    return false;
}

// At least one skill
if (skills.length === 0) {
    alert("Please select at least one skill.");
    return false;
}

// If all validations pass
alert("Form submitted successfully!");
window.location.href = "success.html"; // redirect to a success page
return false; // prevent default submit since we're redirecting
}
</script>
</body>
</html>
```

Output:  
Screenshot1:

## Player Details

**Name\***


Karthi

**DOB\***

DD/MM/YYYY

**Age\***

21

 Please fill out this field.

**Email Id\***

mydaviqe@teleg.eu

**Country\***

India

**Skill\***

☒ Batting ☒ Bowling

**Bat Style**

☒ Right Handed ☐ Left Handed

**Bowl Style**

☐ Right Handed ☒ Left Handed

**Matches\***

80

**Runs\***

Screenshot2:

Player Details

Name\*

Karthi

DOB\*

30/10/2004

Age\*

21

Email Id\*

cerope@polkaroad.net

Country\*

India

Skill\*

☒ Batting ☒ Bowling

Bat Style

☒ Right Handed ☐ Left Handed

Bowl Style

☒ Right Handed ☐ Left Handed

Matches\*

80

Runs\*

7676

Wickets\*

500

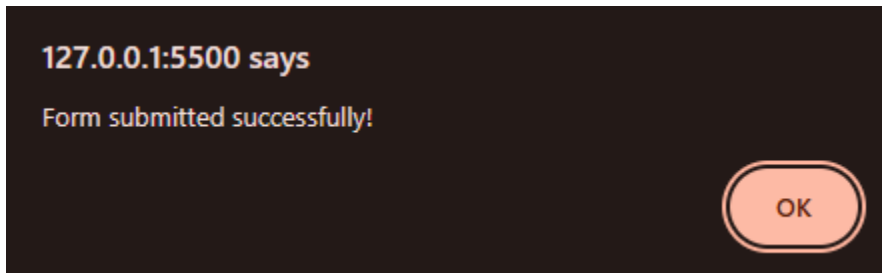
Achievements

ranji trophy

Submit

Reset

Screenshot3:



3. Create a html page with radio buttons to select colors. Selected color should be applied as the background colour of the page.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Background Color Selector</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      text-align: center;
      padding: 50px;
      transition: background-color 0.3s ease;
    }

    .color-options {
      display: inline-block;
      text-align: left;
      padding: 20px;
      border: 2px solid #ccc;
      border-radius: 10px;
      background-color: #fff;
    }

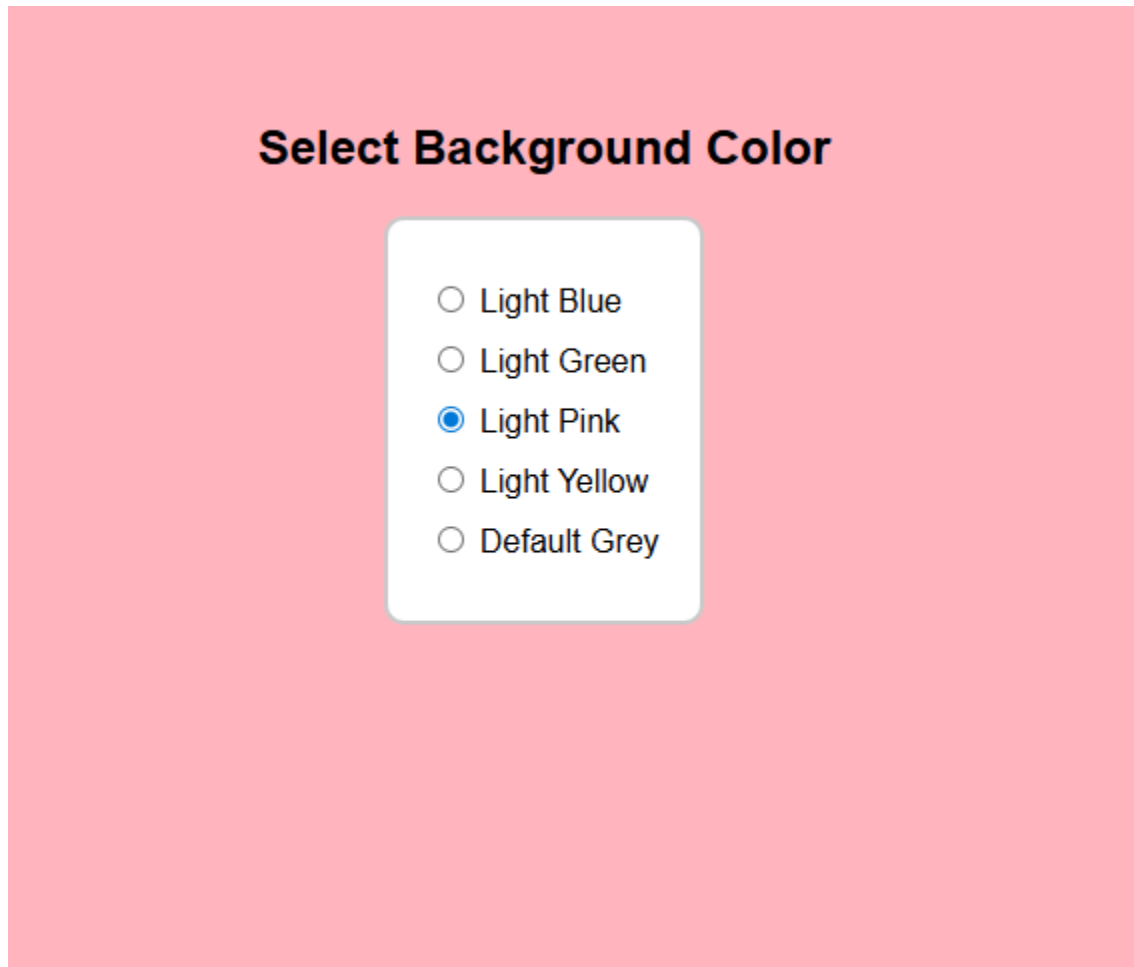
    .color-options label {
      display: block;
      margin: 10px 0;
    }
  </style>
</head>
<body>

  <h2>Select Background Color</h2>

  <div class="color-options">
    <label><input type="radio" name="bgColor" value="lightblue"> Light
Blue</label>
    <label><input type="radio" name="bgColor" value="lightgreen"> Light
Green</label>
```

```
<label><input type="radio" name="bgColor" value="lightpink"> Light  
Pink</label>  
  <label><input type="radio" name="bgColor" value="lightyellow"> Light  
Yellow</label>  
  <label><input type="radio" name="bgColor" value="#f0f0f0"> Default  
Grey</label>  
</div>  
  
<script>  
  // Get all radio buttons  
  const radios = document.querySelectorAll('input[name="bgColor"]');  
  
  radios.forEach(radio => {  
    radio.addEventListener('change', function () {  
      // Change background color when selected  
      document.body.style.backgroundColor = this.value;  
    });  
  });  
</script>  
  
</body>  
</html>
```

Output:



**Select Background Color**

- ☐ Light Blue
- ☐ Light Green
- ☒ Light Pink
- ☐ Light Yellow
- ☐ Default Grey