

1.Simple Calculator

Label Name	Element Name	Constraints
Input1	input1	This element is to get the first input. Type should be 'number'
Input2	input2	This element is to get the second input. Type should be 'number'
Select Operation	Operation	A drop down list contains the following values: Select.., ADD, SUBTRACT, MULTIPLY and DIVIDE. Set these values as its option tag text and option tag's 'value' attributes
	Submit	An image for submit must be included using <u>img</u> tag
	Reset	An image for reset must be included using <u>img</u> tag

CODING :

```
<!DOCTYPE html>
<html>
<head>
  <title>Styled Calculator</title>
  <style>
    body {
      background-color: #f2f2f2;
      font-family: 'Segoe UI', sans-serif;
      display: flex;
      justify-content: center;
      align-items: center;
      height: 100vh;
    }

    .calculator {
      background-color: #fff;
      padding: 30px;
      border-radius: 10px;
```

```
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    text-align: center;
    width: 300px;
}

h2 {
    color: #333;
    margin-bottom: 20px;
}

input, select, button {
    margin: 10px 0;
    padding: 10px;
    width: 90%;
    font-size: 16px;
    border-radius: 5px;
    border: 1px solid #ccc;
}

select {
    background-color: #f9f9f9;
}

button {
    width: 45%;
    border: none;
    cursor: pointer;
    font-weight: bold;
    transition: background-color 0.2s ease;
}

.calculate {
    background-color: #28a745;
    color: white;
}

.calculate:hover {
    background-color: #218838;
}

.clear {
    background-color: #dc3545;
    color: white;
}
```



```
const op = document.getElementById('operation').value;
let result = '';

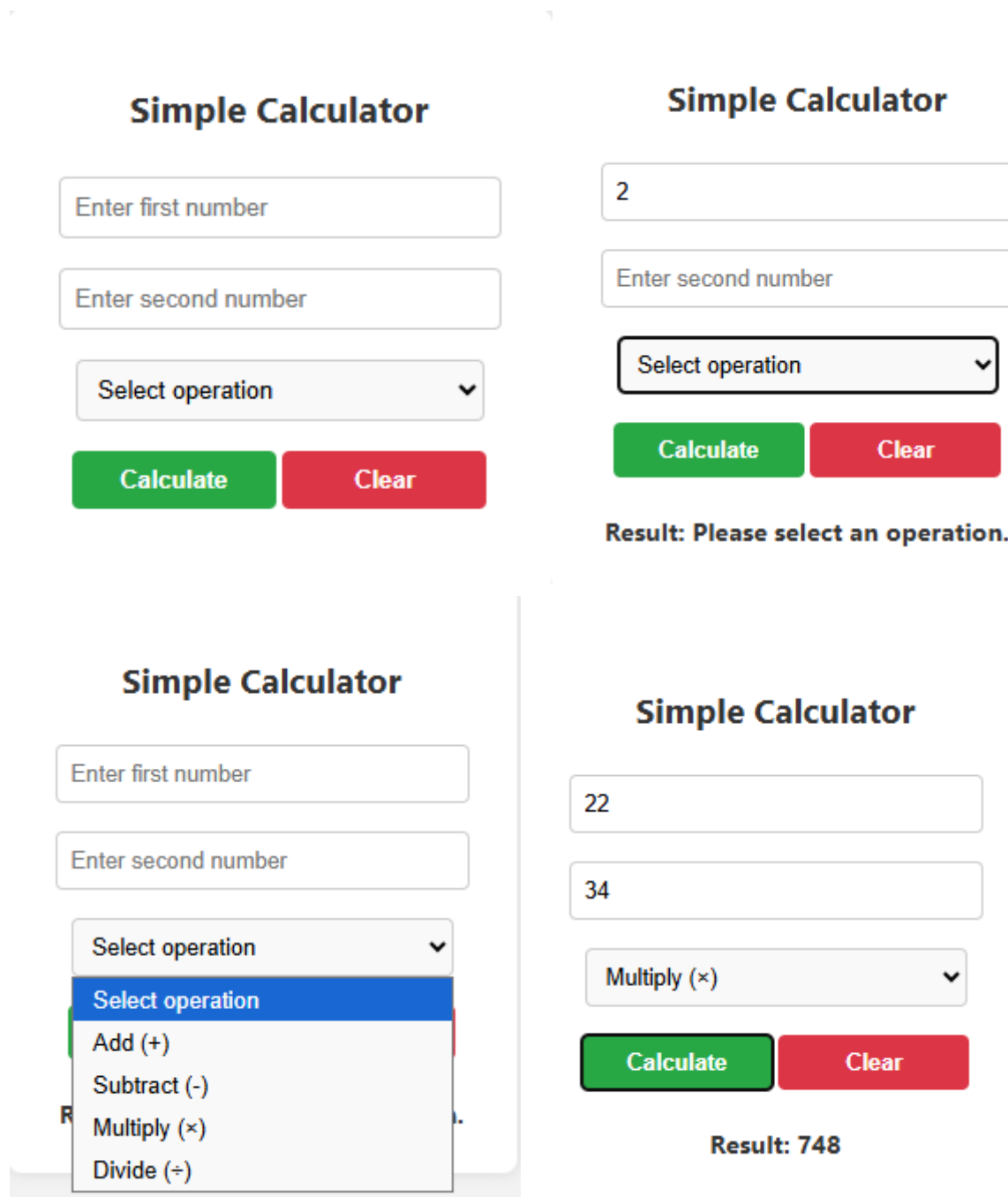
if (isNaN(num1) || isNaN(num2)) {
    result = "Please enter valid numbers.";
} else {
    switch (op) {
        case 'add':
            result = num1 + num2;
            break;
        case 'subtract':
            result = num1 - num2;
            break;
        case 'multiply':
            result = num1 * num2;
            break;
        case 'divide':
            if (num2 === 0) {
                result = "Cannot divide by zero.";
            } else {
                result = num1 / num2;
            }
            break;
        default:
            result = "Please select an operation.";
    }
}

document.getElementById('result').textContent = "Result: " +
result;
}

function clearFields() {
    document.getElementById('num1').value = '';
    document.getElementById('num2').value = '';
    document.getElementById('operation').value = '';
    document.getElementById('result').textContent = '';
}
</script>

</body>
</html>
```

OUTPUT :



2. Player Application Form Validation

In the player application form created, do the following validation using JavaScript.

1. All fields are mandatory
2. Matches played, runs scored, wickets and age should be numbers
3. Player name should contain alphabets only
4. Email should be in the correct format

If all validation rules are satisfied, success page should be displayed.

CODING:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Player Details</title>

<style>

    body {

        background-color: #d0e7f9;

        font-family: Arial, sans-serif;

    }

    .form-box {

        width: 450px;

        margin: 50px auto;

        background-color: #87CEEB;
```

```
border: 2px solid #05486b;

padding: 20px;

border-radius: 8px;
}

h2 {

text-align: center;

background-color: #4682B4;

color: white;

padding: 10px;

border-radius: 5px 5px 0 0;
}

label {

display: block;

margin-top: 10px;

font-weight: bold;
}

input[type="text"],

input[type="email"],

input[type="date"],

textarea,

select {

width: 95%;
```

```
padding: 8px;

margin-top: 5px;

border-radius: 4px;

border: 1px solid #ccc;

}
```

```
.form-group {

margin-bottom: 10px;

}
```

```
.checkbox-group,

.radio-group {

margin-top: 5px;

}
```

```
.buttons {

text-align: center;

margin-top: 20px;

}
```

```
button {

padding: 10px 20px;

margin: 0 10px;

font-size: 16px;

cursor: pointer;
```



```
border: none;

border-radius: 4px;

}

.submit-btn {

background-color: #007bff;

color: white;

}

.reset-btn {

background-color: #6c757d;

color: white;

}

.error {

color: red;

font-size: 14px;

margin-top: 5px;

}

.success {

text-align: center;

color: green;

font-weight: bold;

margin-top: 10px;
```

```
}

.required {

    color: red;

}

</style>

</head>

<body>

<div class="form-box">

    <h2>Player Details</h2>

    <form id="playerForm">

        <div class="form-group">

            <label>Name <span class="required">*</span></label>

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

        </div>

        <div class="form-group">

            <label>DOB <span class="required">*</span></label>

            <input type="text" id="dob" placeholder="DD/MM/YYYY">

        </div>

        <div class="form-group">

            <label>Age <span class="required">*</span></label>

            <input type="text" id="age" placeholder="Enter your age">

        </div>

    </form>

</div>

</body>

</html>
```

```
</div>
```

```
<div class="form-group">
```

```
<label>Email Id <span class="required">*</span></label>
```

```
<input type="email" id="email" placeholder="abc12@xyz.com">
```

```
</div>
```

```
<div class="form-group">
```

```
<label>Country <span class="required">*</span></label>
```

```
<select id="country">
```

```
<option value="">Select Country</option>
```

```
<option>India</option>
```

```
<option>Australia</option>
```

```
<option>England</option>
```

```
<option>South Africa</option>
```

```
</select>
```

```
</div>
```

```
<div class="form-group">
```

```
<label>Skill <span class="required">*</span></label>
```

```
<div class="checkbox-group">
```

```
<input type="checkbox" name="skill" value="Batting"> Batting
```

```
<input type="checkbox" name="skill" value="Bowling"> Bowling
```

```
</div>
```

```
</div>
```

```
<div class="form-group">

  <label>Bat Style</label>

  <div class="radio-group">

    <input type="radio" name="bat" value="Right"> Right Handed

    <input type="radio" name="bat" value="Left"> Left Handed

  </div>

</div>
```

```
<div class="form-group">

  <label>Bowl Style</label>

  <div class="radio-group">

    <input type="radio" name="bowl" value="Right"> Right Handed

    <input type="radio" name="bowl" value="Left"> Left Handed

  </div>

</div>
```

```
<div class="form-group">

  <label>Matches <span class="required">*</span></label>

  <input type="text" id="matches" placeholder="Matches Played">

</div>
```

```
<div class="form-group">

  <label>Runs <span class="required">*</span></label>

  <input type="text" id="runs" placeholder="Total runs scored">
```

```
</div>

<div class="form-group">

  <label>Wickets <span class="required">*</span></label>

  <input type="text" id="wickets" placeholder="Wickets">

</div>

<div class="form-group">

  <label>Achievements</label>

  <textarea rows="3" id="achievements" placeholder="Your
Achievements in Cricket"></textarea>

</div>

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

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

<div class="buttons">

  <button type="submit" class="submit-btn">Submit</button>

  <button type="reset" class="reset-btn">Reset</button>

</div>

</form>

</div>

<script>

  document.getElementById('playerForm').addEventListener('submit',
function (e) {
```

```
e.preventDefault();

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 error = document.getElementById('error');

const success = document.getElementById('success');

error.textContent = "";

success.textContent = "";

const nameRegex = /^[A-Za-z ]+$/;

const emailRegex = /^[^ ]+@[^ ]+\.[a-z]{2,3}$/;

const numberRegex = /^[0-9]+$/;

if (!name || !dob || !age || !email || !country || !matches ||
!runs || !wickets) {

    error.textContent = "Please fill all required fields.";

    return;

}

if (!nameRegex.test(name)) {
```

```
        error.textContent = "Name should contain only letters.";

        return;
    }

    if (!emailRegex.test(email)) {

        error.textContent = "Invalid email format.";

        return;
    }

    if (!numberRegex.test(age) || !numberRegex.test(matches) ||
!numberRegex.test(runs) || !numberRegex.test(wickets)) {

        error.textContent = "Age, Matches, Runs, and Wickets must be
numbers.";

        return;
    }

    success.textContent = "Form submitted successfully ";

    });
</script>

</body>

</html>
```

OUTPUT:

Player Details

Name *

Kamish Kamish

DOB *

02112003

Age *

21

Email Id *

kamishkamish300@gmail.com

Country *

India

Skill *

☒ Batting ☐ Bowling

Bat Style

☐ Right Handed ☒ Left Handed

Bowl Style

☐ Right Handed ☒ Left Handed

Matches *

232

Runs *

23

Wickets *

32

Achievements

nill

Form submitted successfully

Submit

Reset

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

CODING:

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width,
initial-scale=1.0">

  <title>Color Selector</title>

  <style>

    body {

      font-family: sans-serif;

      display: flex;

      flex-direction: column;

      align-items: center;

      justify-content: center;

      min-height: 100vh;

      margin: 0;

      transition: background-color 0.3s ease;

    }

    .color-options {

      background-color: white;

      padding: 20px;

      border-radius: 8px;

      box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
```



```
<input type="radio" id="purple" name="color" value="purple">

<label for="purple">Purple</label>

</div>

<script>

    const colorRadios =
document.querySelectorAll('input[name="color"]');

    const body = document.body;

    colorRadios.forEach((radio) => {

        radio.addEventListener('change', () => {

            body.style.backgroundColor = radio.value;

        });

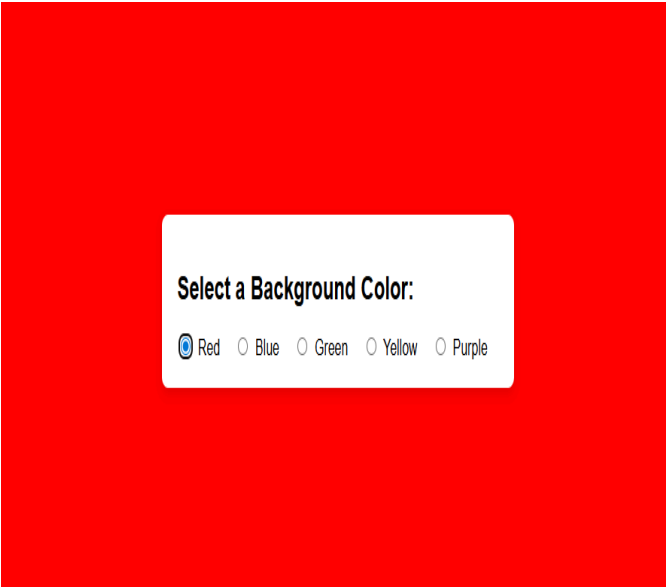
    });

</script>

</body>

</html>
```

OUTPUT:



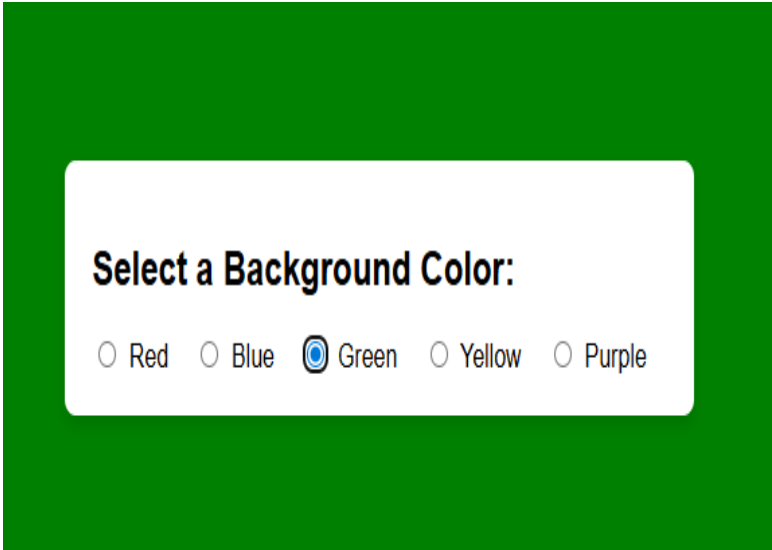
Select a Background Color:

☒ Red ☐ Blue ☐ Green ☐ Yellow ☐ Purple



Select a Background Color:

☐ Red ☒ Blue ☐ Green ☐ Yellow ☐ Purple



Select a Background Color:

☐ Red ☐ Blue ☒ Green ☐ Yellow ☐ Purple