

# Calculator

## Program code:

```
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Simple Calculator</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background: #f5f5f5;
      display: flex;
      justify-content: center;
      align-items: center;
      height: 100vh;
    }
    .calculator {
      background: #fff;
      padding: 20px;
      border-radius: 15px;
      box-shadow: 0 0 15px rgba(0,0,0,0.2);
    }
    .display {
      width: 100%;
      height: 50px;
      font-size: 24px;
      text-align: right;
      margin-bottom: 10px;
      padding: 10px;
      border: 1px solid #ccc;
      border-radius: 8px;
    }
    .buttons {
      display: grid;
      grid-template-columns: repeat(4, 60px);
      gap: 10px;
    }
    .buttons button {
      padding: 15px;
      font-size: 18px;
      border: none;
      border-radius: 8px;
      cursor: pointer;
      background-color: #eee;
      transition: background 0.3s;
    }
    .buttons button:hover {
      background-color: #ddd;
    }
    .buttons .equal {
      background-color: #4CAF50;
      color: white;
    }
    .buttons .equal:hover {
      background-color: #45a049;
    }
  </style>
</head>
<body>
  <div class="calculator">
```

```

<input type="text" class="display" id="display" disabled>
<div class="buttons">
  <button onclick="append('7')">7</button>
  <button onclick="append('8')">8</button>
  <button onclick="append('9')">9</button>
  <button onclick="append('/')">/</button>
  <button onclick="append('4')">4</button>
  <button onclick="append('5')">5</button>
  <button onclick="append('6')">6</button>
  <button onclick="append('')"></button>
  <button onclick="append('1')">1</button>
  <button onclick="append('2')">2</button>
  <button onclick="append('3')">3</button>
  <button onclick="append('-')">-</button>
  <button onclick="append('0')">0</button>
  <button onclick="append('.')">.</button>
  <button onclick="calculate()" class="equal">=</button>
  <button onclick="append('+')">+</button>
  <button onclick="clearDisplay()" style="grid-column: span 4; background: #f44336; color:
rgb(29, 17, 17);">C</button>
</div>
</div>

<script>
  function append(value) {
    document.getElementById('display').value += value;
  }

  function clearDisplay() {
    document.getElementById('display').value = '';
  }

  function calculate() {
    try {
      document.getElementById('display').value =
eval(document.getElementById('display').value);
    } catch {
      document.getElementById('display').value = 'Error';
    }
  }
</script>
</body>
</html>

```

## Ecommerce website

### Program code:

```

import React, { useEffect, useState } from 'react';
import { BrowserRouter as Router, Routes, Route, Link } from 'react-router-dom';
import axios from 'axios';

```

```

const Home = () => {
  const [products, setProducts] = useState([]);

```

```

  useEffect(() => {
    axios.get('http://localhost:5000/api/products')
      .then(res => setProducts(res.data))
      .catch(err => console.error('Error:', err));
  }, []);

```

```

  return (

```

```

<div>
  <h1>Home</h1>
  <Link to="/login">Login</Link> | <Link to="/signup">Signup</Link>
  <h2>Products</h2>
  {products.map(p => (
    <div key={p._id}>
      <h3>{p.name}</h3>
      <p>{p.description}</p>
      <strong>${p.price}</strong>
    </div>
  ))}
</div>
);
};

```

```

const Login = () => {
  const [email, setEmail] = useState('');
  const [password, setPassword] = useState('');

```

```

const handleLogin = async (e) => {
  e.preventDefault();
  try {
    const res = await axios.post('http://localhost:5000/api/login', { email, password });
    localStorage.setItem('token', res.data.token);
    alert('Logged in');
  } catch {
    alert('Login failed');
  }
};

```

```

return (
  <form onSubmit={handleLogin}>
    <h2>Login</h2>
    <input placeholder="Email" onChange={(e) => setEmail(e.target.value)} required />
    <input type="password" placeholder="Password" onChange={(e) =>
setPassword(e.target.value)} required />
    <button type="submit">Login</button>
  </form>
);
};

```

```

const Signup = () => {
  const [email, setEmail] = useState('');
  const [password, setPassword] = useState('');

```

```

const handleSignup = async (e) => {
  e.preventDefault();
  try {
    await axios.post('http://localhost:5000/api/signup', { email, password });
    alert('Signup successful');
  } catch {
    alert('Signup failed');
  }
};

```

```

return (
  <form onSubmit={handleSignup}>
    <h2>Signup</h2>
    <input placeholder="Email" onChange={(e) => setEmail(e.target.value)} required />

```

```
      <input type="password" placeholder="Password" onChange={(e) =>
setPassword(e.target.value)} required />
      <button type="submit">Signup</button>
    </form>
  );
};
```

```
function App() {
  return (
    <Router>
      <Routes>
        <Route path="/" element={<Home />} />
        <Route path="/login" element={<Login />} />
        <Route path="/signup" element={<Signup />} />
      </Routes>
    </Router>
  );
}
```

```
export default App;
```