

App.css

```
* {
  box-sizing: border-box;
}

body {
  font-family: sans-serif;
  margin: 20px;
  padding: 0;
}

h1 {

  margin-top: 0;
  font-size: 22px;
  color: blue;
}


code {
  font-size: 1.2em;
}

ul {
  padding-inline-start: 20px;
}

.box{
  box-sizing: border-box;
  border:

body {
  font-family: sans-serif;
  margin: 20px;
  padding: 0;
}

button {

  background-color: #4CAF50;
  color: #fff;
  border: black;
  padding: 10px 20px;
  border-radius: 4px;
```

```
    cursor: pointer;
  }

  button:hover {
    background-color: #45a049;
  }
}
```

App.js

```
import React, { useState } from 'react';

function Game() {
  const [score, setScore] = useState(0);
  const [fact, setFact] = useState(1);

  const increaseScore = () => {
    setScore(score + 1);
  };
  const Factorial = () => {
    let factorial=1;
    for(let i=1; i<= score ;i++){
      factorial *= i;
    }
    setFact(factorial);
  }

  return (
    <div>
      <h1>Factorial Game</h1>
      <body>
        <div class="box">
          <p>Score: {score}</p>
          <p>Factorial: {fact}</p>
        </div>
        <button onClick={increaseScore}>Click Me!</button>
        <button onClick={Factorial}>Factorial</button>
      </body>
    </div>
  );
}

export default Game;
```

App.test.js

```
import { render, screen } from '@testing-library/react';
import App from './App';

test('renders learn react link', () => {
  render(<App />);
  const linkElement = screen.getByText(/learn react/i);
  expect(linkElement).toBeInTheDocument();
});
```

Index.js

```
import React, { StrictMode } from "react";
import { createRoot } from "react-dom/client";
import "./App.css";

import App from "./App";

const root = createRoot(document.getElementById("root"));
root.render(
  <StrictMode>
    <App />
  </StrictMode>
);
```

Factorial Game

Score: 8

Factorial: 40320

Click Me!

Factorial