

```
import React, { useCallback, useMemo, useState } from "react";
import ReactDOM from "react-dom/client";
import { findNthPrime } from "../Utilis/prime";

const App = () => {
  const [primeNum, setPrimeNum] = useState(0);
  const [square, setSquare] = useState(0);

  console.log("Rendering");

  const prime = useMemo(() => findNthPrime(primeNum), [primeNum]);

  const handlePrime = useCallback((ev) => {
    setPrimeNum(ev.target.value);
    console.log("Prime Rendering");
  }, []);

  const handleSquare = useCallback((ev) => {
    setSquare(ev.target.value);
    console.log("Square Rendering");
  }, []);

  return (
    <div>
      <input type="number" name="prime" value={primeNum} onChange={handlePrime} />
      <div>nth Prime: {prime}</div>

      <input type="number" name="square" value={square} onChange={handleSquare} />
      <div>square: {square * square}</div>
    </div>
  );
};

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

export default App;
```