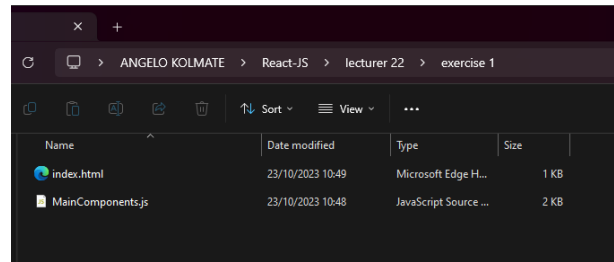


# EVENTS MANAGEMENT

## EXERCISE 1 : Button event handling didalam CALCULATOR

- Create Folder dengan nama “lecturer 22” dan create folder baru didalamnya “exercise 1”
- Didalam Folder tersebut kita akan membuat 2 code yaitu : “index.html”, ”MainComponents.js”



- Code HTML

```
C:\Users\PT.ADITYA\React-JS\lecturer 22\exercise 1\index.html - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
styles.css index.html MainComponents.js index.html Greetings.js Login.js index.js
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <title>Calculator</title>
5 <meta charset="utf-8">
6 <meta name="viewport" content="width=device-width, initial-scale=1">
7 <script src="https://unpkg.com/react@16/umd/react.production.min.js"></script>
8 <script src="https://unpkg.com/react-dom@16/umd/react-dom.production.min.js"></script>
9 <script src="https://unpkg.com/babel-standalone@6.15.0/babel.min.js"></script>
10 <script src="./MainComponents.js" type="text/babel"></script>
11 </head>
12 <body>
13 <div id="app"></div>
14 </body>
15 </html>
```

- Code JS (mengcreate class, object, set value, dan set arithmetic operations)

```
C:\Users\PT.ADITYA\React-JS\lecturer 22\exercise 1\MainComponents.js - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
styles.css index.html MainComponents.js index.html Greetings.js Login.js index.js
2 class Header extends React.Component {
3   constructor() {
4     super();
5     // membuat objek state
6     this.state = {
7       angka1: "0",
8       angka2: "0",
9       result: "0"
10    };
11  }
12
13  // Set values
14  setValue1 = (val1) => { this.setState({angka1: ""+val1}); }
15  setValue2 = (val2) => { this.setState({angka2: ""+val2}); }
16
17  // Arithmetic operations such as addition, subtraction, division, multiplication
18  funcMultiply = (val) => {
19    var hasil = parseInt(this.state.angka1) * parseInt(this.state.angka2);
20    this.setState({ result: ""+hasil });
21  }
22  funcDivide = (val) => {
23    var hasil = parseInt(this.state.angka1) / parseInt(this.state.angka2);
24    this.setState({ result: ""+hasil });
25  }
26  funcSubtract = (val) => {
27    var hasil = parseInt(this.state.angka1) - parseInt(this.state.angka2);
28    this.setState({ result: ""+hasil });
29  }
30  funcAdd = (val) => {
31    var hasil = parseInt(this.state.angka1) + parseInt(this.state.angka2);
32    this.setState({ result: ""+hasil });
33  }
34
35  render () {
36    return (
37      <div>
38        <h1>Simple Calculator ReactJs</h1>
39        Input 1: <input value={this.state.angka1} onChange={ (e) => {this.setValue1(e.target.value)}} />
40        <br/>
41        Input 2: <input value={this.state.angka2} onChange={ (e) => {this.setValue2(e.target.value)}} />
42        <h1>Result: {this.state.result}</h1>
43        <button onClick={this.funcMultiply}>Multiply</button>
44        <button onClick={this.funcDivide}>Division</button>
45        <button onClick={this.funcSubtract}>Subtract</button>
46        <button onClick={this.funcAdd}>Addition</button>
47      </div>
48    );
49  }
50
51  // render komponen ke RealDOM
52  ReactDOM.render(<Header />, document.getElementById("app"));
53}
```

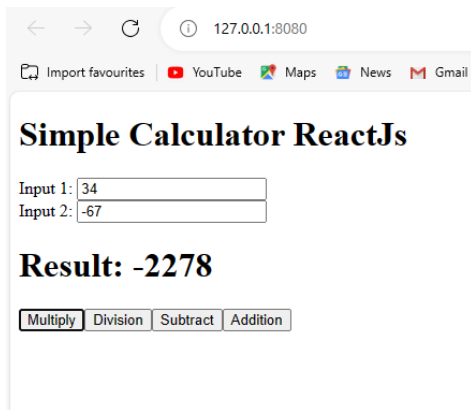
- Jalankan di CMD live-server

```
C:\WINDOWS\system32\cmd. X + v
Microsoft Windows [Version 10.0.22621.2428]
(c) Microsoft Corporation. All rights reserved.

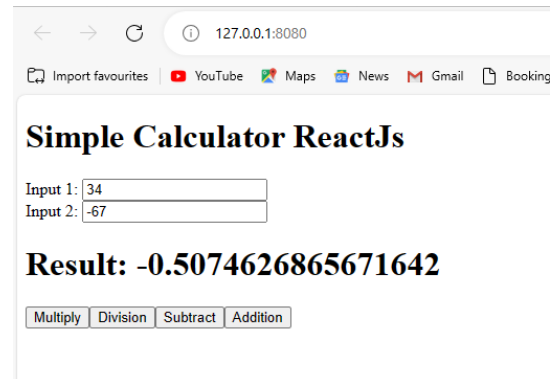
C:\Users\PT.ADITYA\React-JS\lecturer 22\exercise 1>live-server
Serving "C:\Users\PT.ADITYA\React-JS\lecturer 22\exercise 1" at http://127.0.0.1:8080
Ready for changes
GET /myscripts.js 404 7.397 ms - 151
Change detected C:\Users\PT.ADITYA\React-JS\lecturer 22\exercise 1\index.html
```

## EXPECTED OUTPUT

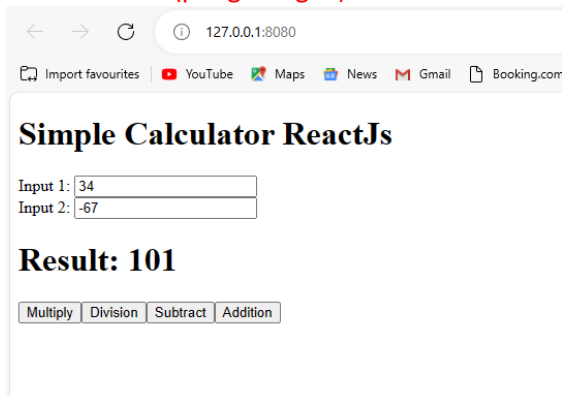
- Multiply (perkalian)



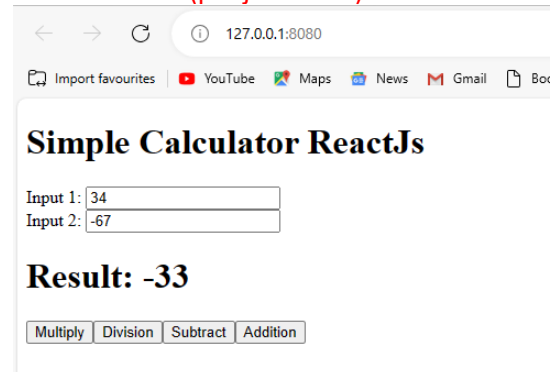
- Division (pembagian)



- Subtract (pengurangan)

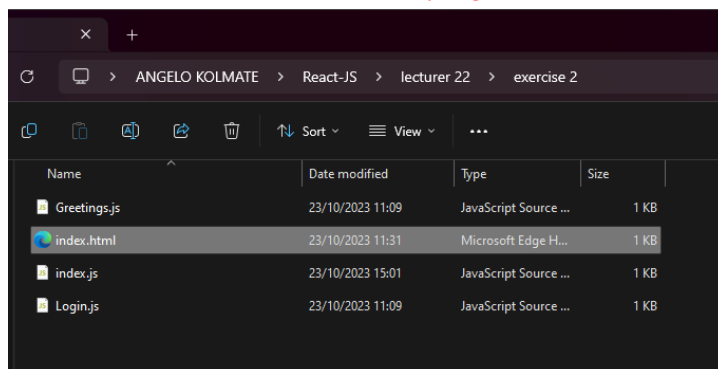


- Addition (penjumlahan)



## EXERCISE 2 : LOGIN AND LOGOUT menggunakan ReactJS Conditional Rendering.

- Create folder baru “exercise 2” yang akan diisi 4 code



- HTML code

```

C:\Users\PT.ADITYA\React-JS\lecturer 22\exercise 2\index.html - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
styles.css index.html MainComponents.js index.html Greetings.js Login.js index.js
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <title>CSS test</title>
5 <meta charset="utf-8">
6 <meta name="viewport" content="width=device-width, initial-scale=1">
7 <script src="https://unpkg.com/react@16/umd/react.production.min.js"></script>
8 <script src="https://unpkg.com/react-dom@16/umd/react-dom.production.min.js"></script>
9 <script src="https://unpkg.com/babel-standalone@6.15.0/babel.min.js"></script>
10 <script src="./Greetings.js" type="text/babel"></script>
11 <script src="./Login.js" type="text/babel"></script>
12 <script src="./index.js" type="text/babel"></script>
13 </head>
14 <body>
15 <div id="app"></div>
16 </body>
17 </html>

```

- component Greeting File

(terdapat 3 function didalamnya. Untuk menampilkan welcome, sign in, greetings. Terdapat “return” untuk menampilkan).

```

C:\Users\PT.ADITYA\React-JS\lecturer 22\exercise 2\Greetings.js - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
styles.css index.html MainComponents.js index.html Greetings.js
1 // welcome
2 function UserGreeting (props) {
3   return <h1>Welcome back!</h1>;
4 }
5 // sign in
6 function GuestGreeting(props) {
7   return <h1>Please sign up.</h1>;
8 }
9
10 // choose greetings
11 function Greeting(props) {
12   const isLoggedIn = props.isLoggedIn;
13   if (isLoggedIn) {
14     return <UserGreeting />;
15   }
16   return <GuestGreeting />;
17 }

```

- Component Buttons File

(untuk mengcreate Button Login dan Button Logout)

```

C:\Users\PT.ADITYA\React-JS\lecturer 22\exercise 2>Login.js - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
styles.css index.html MainComponents.js index.html Greetings.js Login.js
1 // create button login
2 function LoginButton(props) {
3   return (
4     <button onClick={props.onClick}>
5       Login
6     </button>
7   );
8 }
9
10 // create button logout
11 function LogoutButton(props) {
12   return (
13     <button onClick={props.onClick}>
14       Logout
15     </button>
16   );
17 }

```

- **Component Handle Login**  
(mengcreate CREATE CLASS untuk Handle Login)

```
C:\Users\PT.ADITYA\React-JS\lecturer 22\exercise 2\index.js - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
styles.css index.html MainComponents.js index.html Greetings.js Login.js index.js
1 class LoginControl extends React.Component {
2   constructor(props) {
3     super(props);
4     this.handleClick = this.handleClick.bind(this);
5     this.handleLogoutClick = this.handleLogoutClick.bind(this);
6     this.state = { isLoggedIn: false };
7   }
8   handleClick() {
9     this.setState({ isLoggedIn: true });
10  }
11  handleLogoutClick() {
12    this.setState({ isLoggedIn: false });
13  }
14  render() {
15    const isLoggedIn = this.state.isLoggedIn;
16    let button;
17    if (isLoggedIn) {
18      button = <LogoutButton onClick={this.handleLogoutClick} />;
19    } else {
20      button = <LoginButton onClick={this.handleClick} />;
21    }
22    return (
23      <div>
24        <Greeting isLoggedIn={isLoggedIn} />
25        {button}
26      </div>
27    );
28  }
29 }
30 ReactDOM.render(<LoginControl />, document.getElementById("app"));
```

- **RUN MENGGUNAKAN CMD live-server**

```
C:\WINDOWS\system32\cmd. X + v
Microsoft Windows [Version 10.0.22621.2428]
(c) Microsoft Corporation. All rights reserved.

C:\Users\PT.ADITYA\React-JS\lecturer 22\exercise 2>live-server
Serving "C:\Users\PT.ADITYA\React-JS\lecturer 22\exercise 2" at http://127.0.0.1:8080
Ready for changes
GET /favicon.ico 404 5.933 ms - 150
Change detected C:\Users\PT.ADITYA\React-JS\lecturer 22\exercise 2\index.js
```

## EXPECTED OUTPUT

