

REPORT ReactJS MANAGEMENT & CONDITIONALS

EXERCISE 1 Calculator Sederhana

Buat code dari MainComponents.js

Pada tahap ini sudah dibuat class Header yang terdapat 3 objek state yaitu angka1, angka2, dan result serta penggunaan fungsi setState untuk mengatur update dari dua objek state yaitu angka1 dan angka2. Dan dibuat juga fungsi-fungsi seperti Multiply, Additional, Subtract, Divide untuk proses perhitungan.

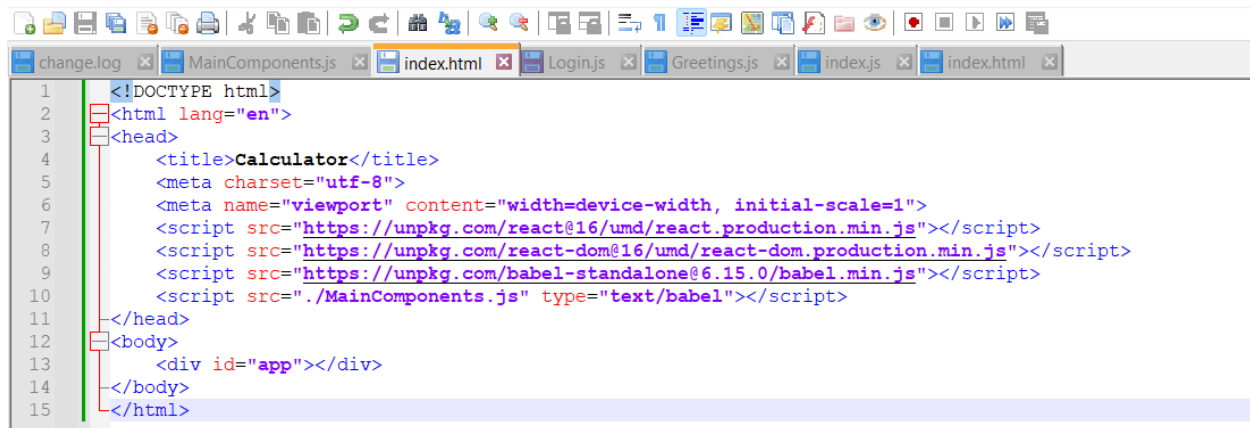
```
D:\FRONT-END\React-JS\exercise\exercise 1\MainComponents.js - Notepad++
Berkas Edit Cari Tampilan Pengodean Bahasa Pengaturan Alat Makro Jalankan Plugin Jendela ?
change.log MainComponents.js index.html Login.js Greetings.js index.js index.html
1 class Header extends React.Component {
2   constructor () {
3     super();
4     //membuat objek state
5     this.state = {
6       angka1: "0",
7       angka2: "0",
8       result: "0"
9     };
10  }
11
12  setValue1 = (val1) => { this.setState ({ angka1:""+val1}); }
13  setValue2 = (val2) => { this.setState ({ angka2:""+val2}); }
14
15  funcMultiply = (val1) => {
16    var hasil = parseInt(this.state.angka1) * parseInt (this.state.angka2);
17    this.setState({ result: ""+hasil });
18  }
19  funcDivide = (val1) => {
20    var hasil = parseInt(this.state.angka1) / parseInt (this.state.angka2);
21    this.setState({ result: ""+hasil });
22  }
23  funcSubtract = (val1) => {
24    var hasil = parseInt(this.state.angka1) - parseInt (this.state.angka2);
25    this.setState({ result: ""+hasil });
26  }
27  funcAdd = (val1) => {
28    var hasil = parseInt(this.state.angka1) + parseInt (this.state.angka2);
29    this.setState({ result: ""+hasil });
30  }
31  render () {
32    return (
33      <div>
34        <h1>Simple Calculator ReactJs</h1>
35        Input 1: <input value={this.state.angka1} onChange={e => {this.setValue1(e.target.value)}}/>
36        <br/>
37        Input 2: <input value={this.state.angka2} onChange={e => {this.setValue2(e.target.value)}}/>
38        <br/>
39        <h1>Result : {this.state.result}</h1>
40        <button onClick={this.funcMultiply}>Multiply</button>
41        <button onClick={this.funcDivide}>Division</button>
42        <button onClick={this.funcSubtract}>Subtract</button>
43        <button onClick={this.funcAdd}>Addition</button>

```

Terdapat juga fungsi `render()` untuk menampilkan tempat penginputan 1 dan 2 beserta button dari seetiap proses perhitungan.

```
30 }
31 render () {
32   return (
33     <div>
34       <h1>Simple Calculator ReactJs</h1>
35       Input 1: <input value={this.state.angka1} onChange={(e) => {this.setValue1(e.target.value)}}/>
36       <br/>
37       Input 2: <input value={this.state.angka2} onChange={(e) => {this.setValue2(e.target.value)}}/>
38       <br/>
39       <h1>Result : {this.state.result}</h1>
40       <button onClick={this.funcMultiply}>Multiply</button>
41       <button onClick={this.funcDivide}>Division</button>
42       <button onClick={this.funcSubtract}>Subtract</button>
43       <button onClick={this.funcAdd}>Addition</button>
44     </div>
45   );
46 }
47
48
49 ReactDOM.render(<Header />, document.getElementById("app"));
```

Buat code dari index.html untuk mengetahui lokasi penyimpanan dari MainComponents.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>
```

Output

Hasil dari fungsi Multiply

Simple Calculator ReactJs

Input 1: 10
Input 2: 2

Result : 20

Multiply Division Subtract Addition

Hasil dari fungsi Division

Simple Calculator ReactJs

Input 1: 10
Input 2: 2

Result : 5

Multiply Division Subtract Addition

Hasil dari fungsi Subtract

Simple Calculator ReactJs

Input 1: 10

Input 2: 2

Result : 8

Multiply Division Subtract Addition

Hasil dari fungsi Addition

Simple Calculator ReactJs

Input 1: 10

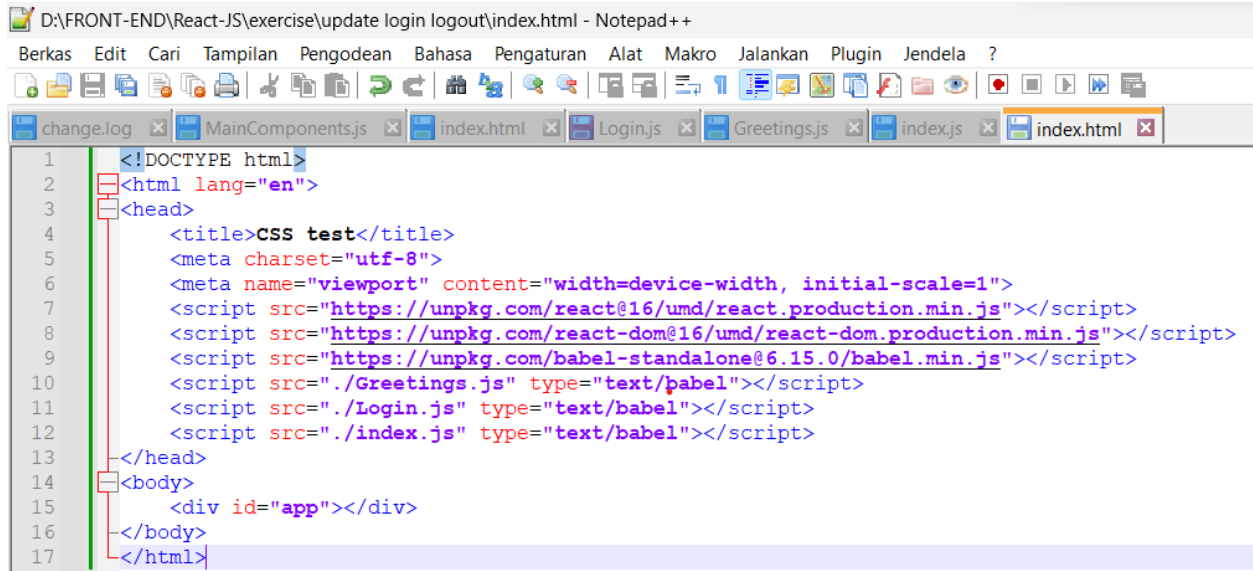
Input 2: 2

Result : 12

Multiply Division Subtract Addition

EXERCISE 2 Update Login Logout

Buat code index.html untuk mengetahui lokasi penyimpanan Greetings.js, Login.js, dan index.js.

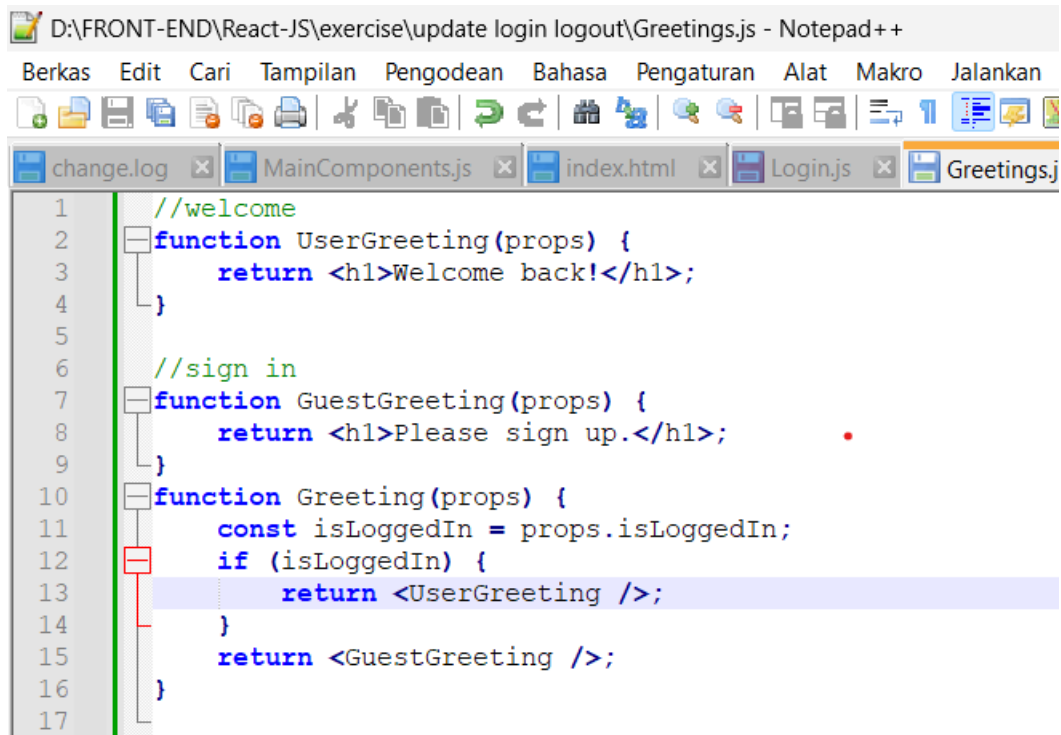


```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <title>CSS test</title>
5   <meta charset="utf-8">
6   <meta name="viewport" content="width=device-width, initial-scale=1">
7   <script src="https://unpkg.com/react@16/umd/react.production.min.js"></script>
8   <script src="https://unpkg.com/react-dom@16/umd/react-dom.production.min.js"></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>
```

Buat code index.js dengan class LoginControl sebagai tempat untuk proses update ketika user menekan button Login/Logout.

```
D:\FRONT-END\React-JS\exercise\update login logout\index.js - Notepad++
Berkas Edit Cari Tampilan Pengodean Bahasa Pengaturan Alat Makro Jalankan Plugin Jendela ?
change.log x MainComponents.js x index.html x Login.js x Greetings.js x index.js x
1 // handle login class
2 class LoginControl extends React.Component {
3   constructor (props) {
4     super (props);
5     this.handleClick= this.handleClick.bind(this);
6     this.handleClick = this.handleClick.bind(this);
7     this.state = {isLoggedIn: false }; // private data
8   }
9   handleClick() {
10    this.setState({isLoggedIn: true});
11  }
12  handleClick() {
13    this.setState({isLoggedIn: false });
14  }
15
16  render() {
17    const isLoggedIn= this.state.isLoggedIn;
18    let button;
19    if (isLoggedIn) {
20      button= <LogoutButton onClick={this.handleClick} />;
21    } else {
22      button= <LoginButton onClick={this.handleClick} />;
23    }
24
25    return (
26      <div>
27        <Greeting isLoggedIn={isLoggedIn} />
28        {button}
29      </div>
30    );
31  }
32 }
33 // render komponen ke ReactDOM
34 ReactDOM.render (<LoginControl />, document.getElementById("app"));
```

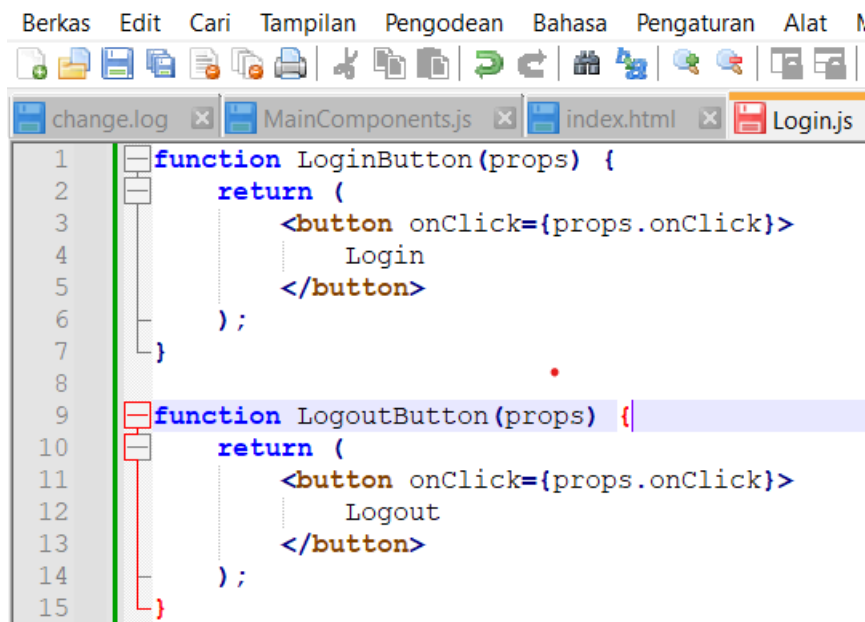
Buat code Greetings.js untuk tempat text yang akan ditampilkan ketika user menekan button Login/Logout.



The screenshot shows the Notepad++ editor with the file Greetings.js open. The code defines three functions: UserGreeting, GuestGreeting, and Greeting. UserGreeting returns a welcome message, and GuestGreeting returns a sign-up prompt. Greeting uses a conditional statement to return either UserGreeting or GuestGreeting based on the isLoggedIn prop.

```
1 //welcome
2 function UserGreeting(props) {
3   return <h1>Welcome back!</h1>;
4 }
5
6 //sign in
7 function GuestGreeting(props) {
8   return <h1>Please sign up.</h1>;
9 }
10 function Greeting(props) {
11   const isLoggedIn = props.isLoggedIn;
12   if (isLoggedIn) {
13     return <UserGreeting />;
14   }
15   return <GuestGreeting />;
16 }
17
```

Buat code Login.js sebagai tempat pembuatan button Login dan Logout.



The screenshot shows the Notepad++ editor with the file Login.js open. The code defines two functions: LoginButton and LogoutButton. LoginButton returns a button element with the text 'Login' and an onClick prop. LogoutButton returns a button element with the text 'Logout' and an onClick prop.

```
1 function LoginButton(props) {
2   return (
3     <button onClick={props.onClick}>
4       Login
5     </button>
6   );
7 }
8
9 function LogoutButton(props) {
10   return (
11     <button onClick={props.onClick}>
12       Logout
13     </button>
14   );
15 }
```

Output setelah button Login dan Logout dipencet.

