

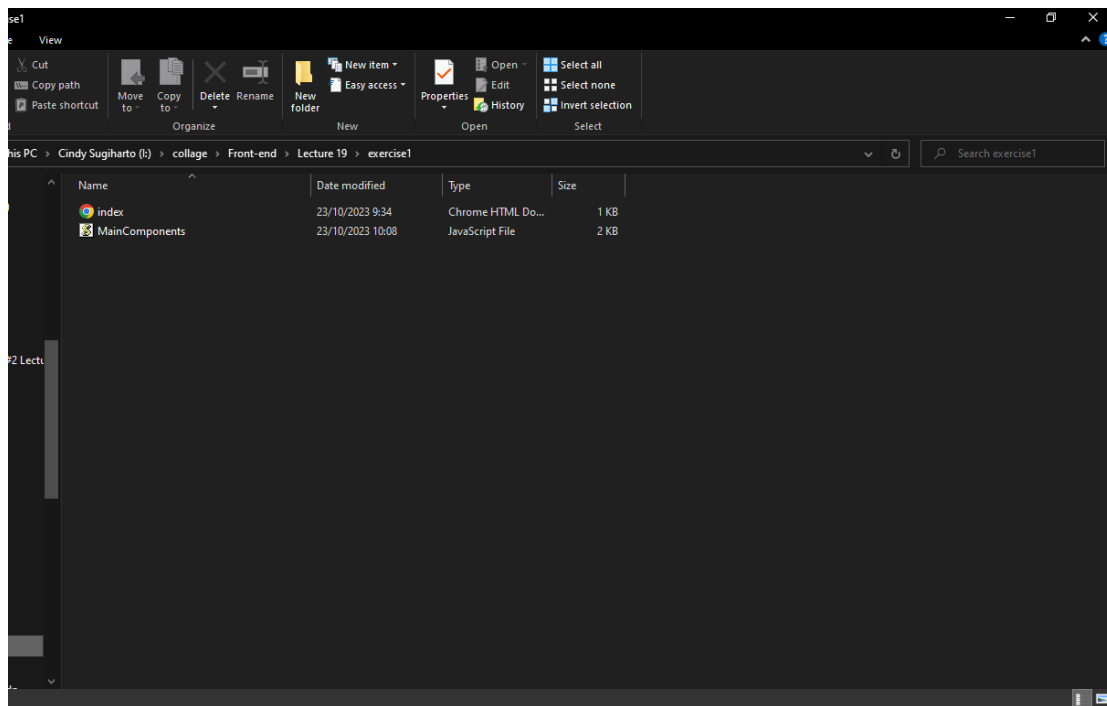
Sugiharto, Amelia C

Front-End Web Development

Lecture19 - ReactJS Events Management & Conditionals

## #Exercise1

**Langkah 1:** Buatlah folder baru untuk memasukkan file index.html dan MainComponents.js



## Langkah 2: Ketikan code index.html dan MainComponents.js dan save lalu masukkan pada folder baru tadi

```
I:\collage\Front-end\Lecture 19\exercise\index.html - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
index.html
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>
16
```

Hyper Text Markup Language file length: 540 lines: 16 Ln: 16 Col: 8 Pos: 541 Windows (CR LF) UTF-8 INS

```
I:\collage\Front-end\Lecture 19\exercise\MainComponents.js - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
index.html MainComponents.js
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 = (val) => {
16    var hasil = parseInt(this.state.angka1) * parseInt (this.state.angka2);
17    this.setState({ result: ""+hasil });
18  }
19  funcDivide = (val) => {
20    var hasil = parseInt(this.state.angka1) / parseInt (this.state.angka2);
21    this.setState({ result: ""+hasil });
22  }
23  funcSubtract = (val) => {
24    var hasil = parseInt(this.state.angka1) - parseInt (this.state.angka2);
25    this.setState({ result: ""+hasil });
26  }
27  funcAdd = (val) => {
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>

```

JavaScript file length: 1.531 lines: 49 Ln: 49 Col: 61 Pos: 1.532 Windows (CR LF) UTF-8 INS

```

10
11
12   setValue1 = (val1) => { this.setState ({ angka1:""+val1}); }
13   setValue2 = (val2) => { this.setState ({ angka2:""+val2}); }
14
15   funcMultiply = (val) => {
16     var hasil = parseInt(this.state.angka1) * parseInt (this.state.angka2);
17     this.setState({ result: ""+hasil });
18   }
19   funcDivide = (val) => {
20     var hasil = parseInt(this.state.angka1) / parseInt (this.state.angka2);
21     this.setState({ result: ""+hasil });
22   }
23   funcSubtract = (val) => {
24     var hasil = parseInt(this.state.angka1) - parseInt (this.state.angka2);
25     this.setState({ result: ""+hasil });
26   }
27   funcAdd = (val) => {
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>
44       </div>
45     );
46   }
47 }
48
49 ReactDOM.render(<Header />, document.getElementById("app"));
```

JavaScript file      length: 1,531    lines: 49      Ln: 49   Col: 61   Pos: 1,532      Windows (CR LF)    UTF-8      INS

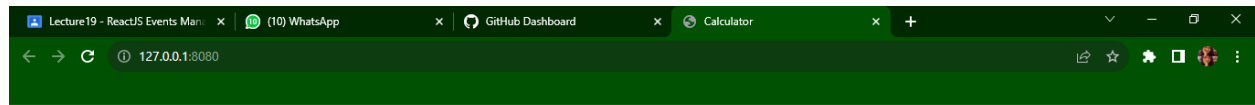
**Langkah 3:** Kemudian run cmd pada folder yang berisi 2 file di atas dan ketik live-server lalu enter.

```

C:\WINDOWS\system32\cmd.exe - "node" "C:\Users\HP PC\AppData\Roaming\npm\node_modules\live-server\live-server.js"
Microsoft Windows [Version 10.0.19045.3570]
(c) Microsoft Corporation. All rights reserved.

I:\collage\Front-end\Lecture 19\exercise1>live-server
Serving "I:\collage\Front-end\Lecture 19\exercise1" at http://127.0.0.1:8080
Ready for changes
```

# Hasil Oupatnya:



## Simple Calculator ReactJs

Input 1:

Input 2:

**Result : 16**



## Simple Calculator ReactJs

Input 1:

Input 2:

**Result : 4**

---



## Simple Calculator ReactJs

Input 1:

Input 2:

Result : 6



## Simple Calculator ReactJs

Input 1:

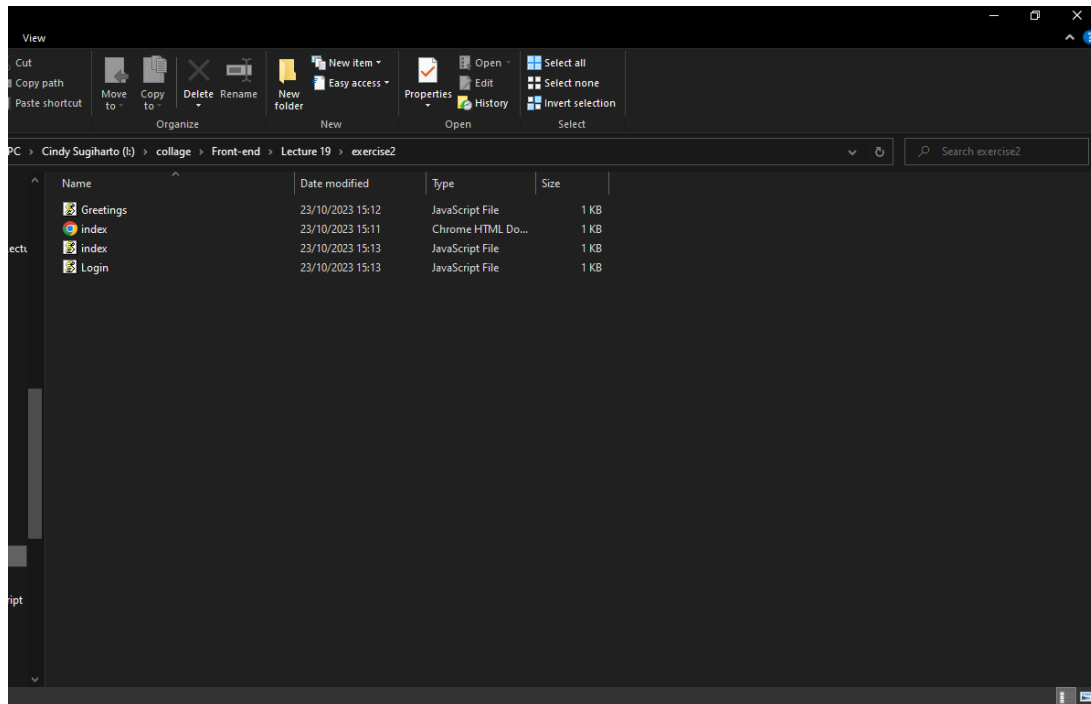
Input 2:

Result : 10

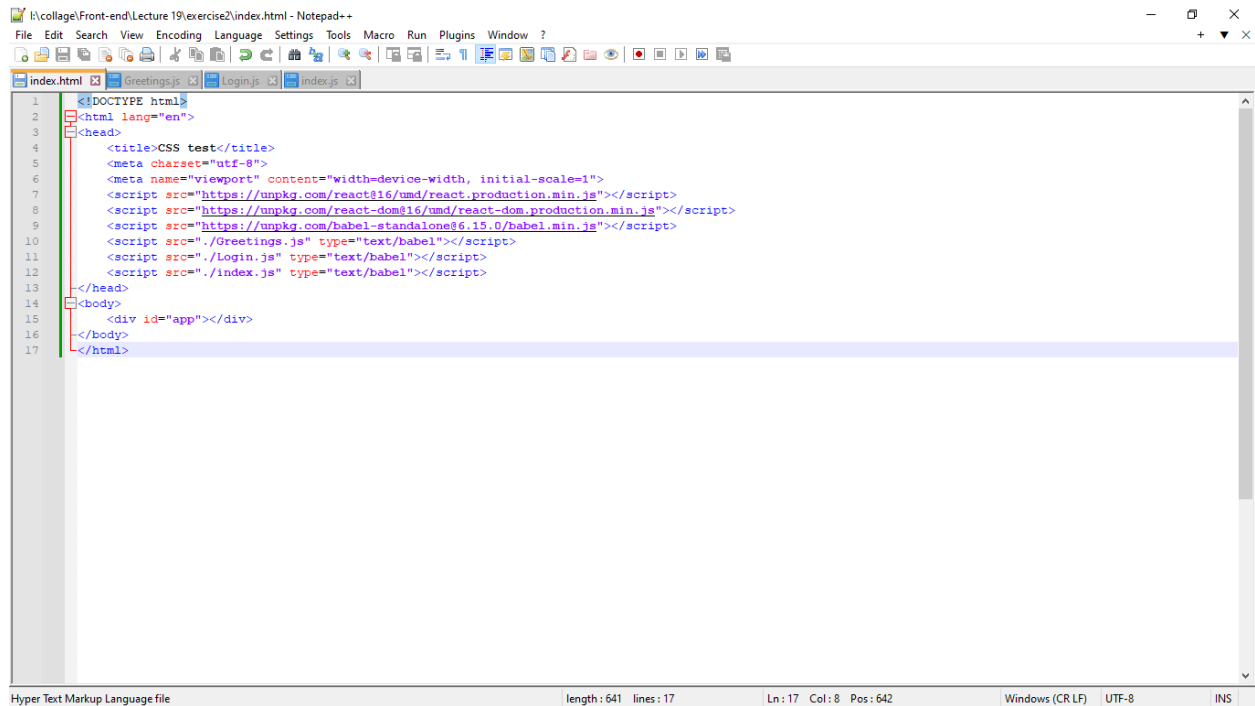
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## #Exercise2

**Langkah 1:** Buatlah folder baru untuk memasukkan file index.html, Greetings.js, Login.js dan index.js



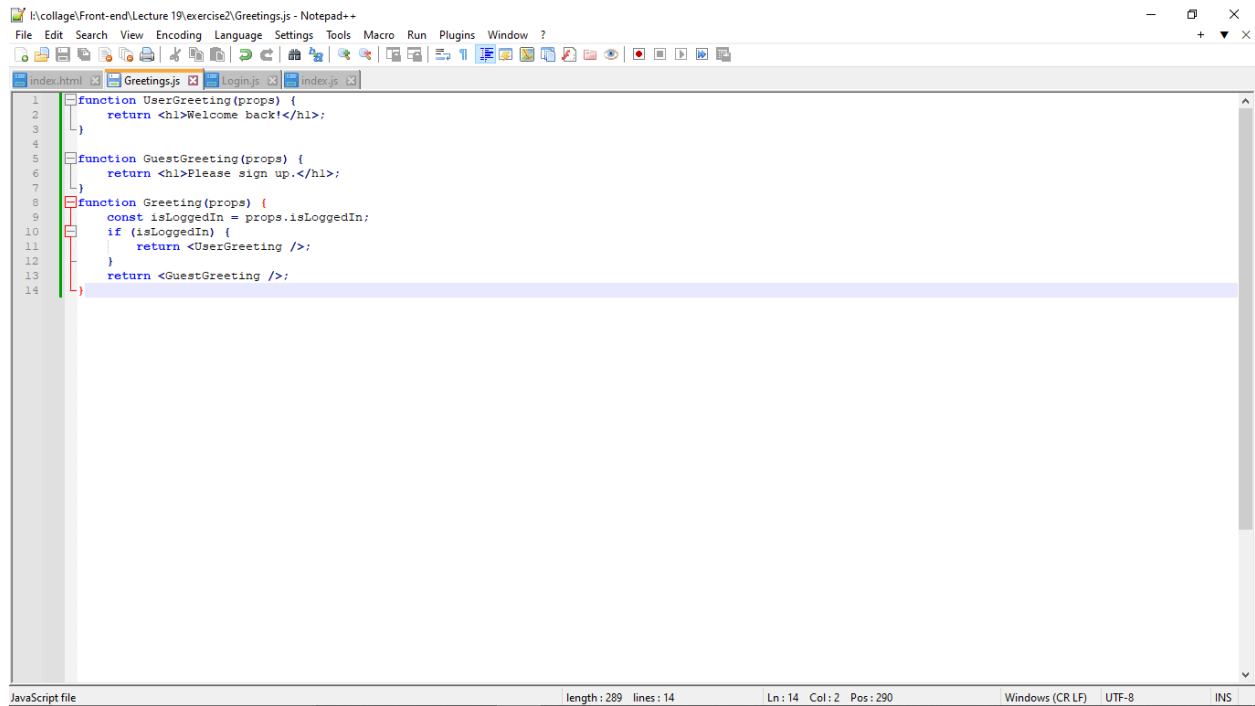
## Langkah 2: Ketikan code nya lalu save dan masukkan pada folder baru tadi



The screenshot shows a Notepad++ window with the file path `I:\collage\Front-end\Lecture 19\exercise2\index.html`. The code is an HTML document with the following structure:

```
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>
```

The status bar at the bottom indicates: Hyper Text Markup Language file, length: 641, lines: 17, Ln: 17, Col: 8, Pos: 642, Windows (CR LF), UTF-8, INS.



The screenshot shows a Notepad++ window with the file path `I:\collage\Front-end\Lecture 19\exercise2\Greetings.js`. The code is a JavaScript file with the following structure:

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

The status bar at the bottom indicates: JavaScript file, length: 289, lines: 14, Ln: 14, Col: 2, Pos: 290, Windows (CR LF), UTF-8, INS.

```
t:\collage\Front-end\Lecture 19\exercise2\Login.js - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
index.html Greetings.js Login.js index.js
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 }
```

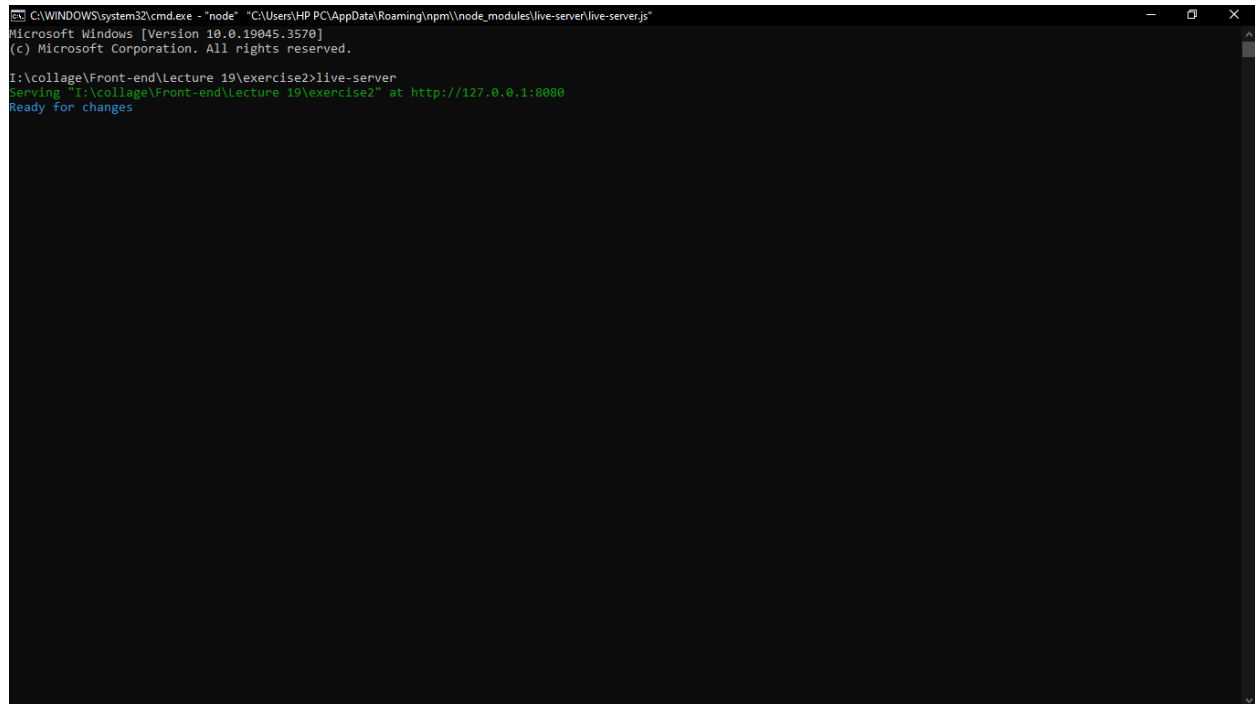
JavaScript file length: 220 lines: 15 Ln: 15 Col: 2 Pos: 221 Windows (CR LF) UTF-8 INS

```
t:\collage\Front-end\Lecture 19\exercise2\index.js - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
index.html Greetings.js Login.js index.js
1 class LoginControl extends React.Component {
2   constructor(props) {
3     super(props);
4     this.handleLoginClick = this.handleLoginClick.bind(this);
5     this.handleLogoutClick = this.handleLogoutClick.bind(this);
6     this.state = {isLoggedIn: false};
7   }
8   handleLoginClick() {
9     this.setState({isLoggedIn: true});
10  }
11  handleLogoutClick() {
12    this.setState({isLoggedIn: false});
13  }
14
15  render() {
16    const isLoggedIn = this.state.isLoggedIn;
17    let button;
18    if (isLoggedIn) {
19      button = <LogoutButton onClick={this.handleLogoutClick} />;
20    } else {
21      button = <LoginButton onClick={this.handleLoginClick} />;
22    }
23
24    return (
25      <div>
26        <Greeting isLoggedIn={isLoggedIn} />
27        {button}
28      </div>
29    );
30  }
31 }
32
33 ReactDOM.render(<LoginControl />, document.getElementById("app"));
```

JavaScript file length: 796 lines: 33 Ln: 33 Col: 68 Pos: 797 Windows (CR LF) UTF-8 INS



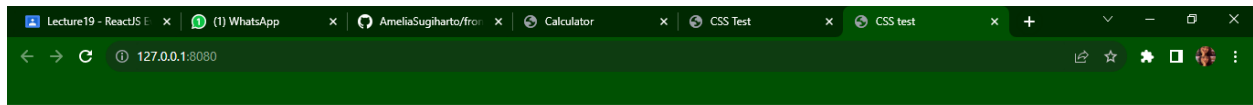
**Langkah 3:** Kemudian run cmd pada folder yang berisi 4 file di atas dan ketik live-server lalu enter.

A screenshot of a Windows Command Prompt window. The title bar reads "C:\WINDOWS\system32\cmd.exe - "node" "C:\Users\HP\PC\AppData\Roaming\npm\node\_modules\live-server\live-server.js"". The window content shows the following text: "Microsoft Windows [Version 10.0.19045.3570] (c) Microsoft Corporation. All rights reserved. I:\collage\Front-end\Lecture 19\exercise2>live-server Serving I:\collage\Front-end\Lecture 19\exercise2 at http://127.0.0.1:8080 Ready for changes". The text is displayed in a monospaced font with green color for the command and status messages. The background is black.

```
C:\WINDOWS\system32\cmd.exe - "node" "C:\Users\HP\PC\AppData\Roaming\npm\node_modules\live-server\live-server.js"
Microsoft Windows [Version 10.0.19045.3570]
(c) Microsoft Corporation. All rights reserved.

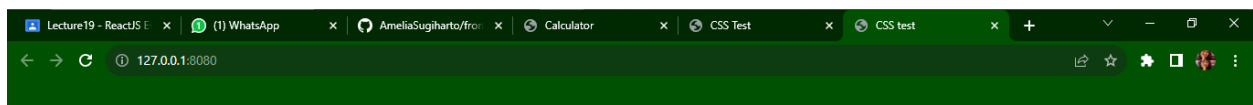
I:\collage\Front-end\Lecture 19\exercise2>live-server
Serving I:\collage\Front-end\Lecture 19\exercise2 at http://127.0.0.1:8080
Ready for changes
```

# Hasil Output:



Please sign up.

Login



Welcome back!

Logout

