

TUGAS INDIVIDU

MODUL 6 REDUX

**Disusun sebagai
MATA KULIAH : PEMROGRAMAN BERBASIS FRAMEWORK**

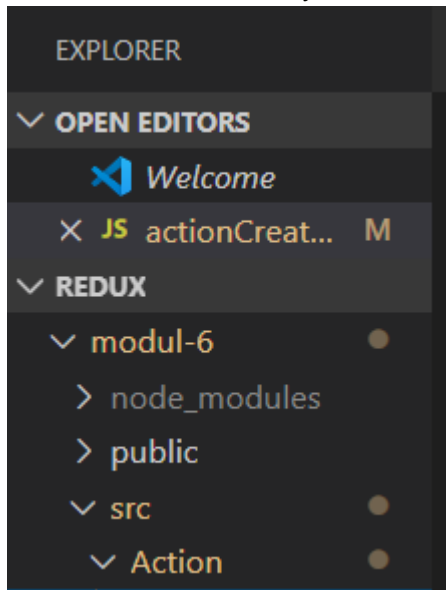
Oleh :
Yoga Ibnudinata / 1741720060
TI 3-A



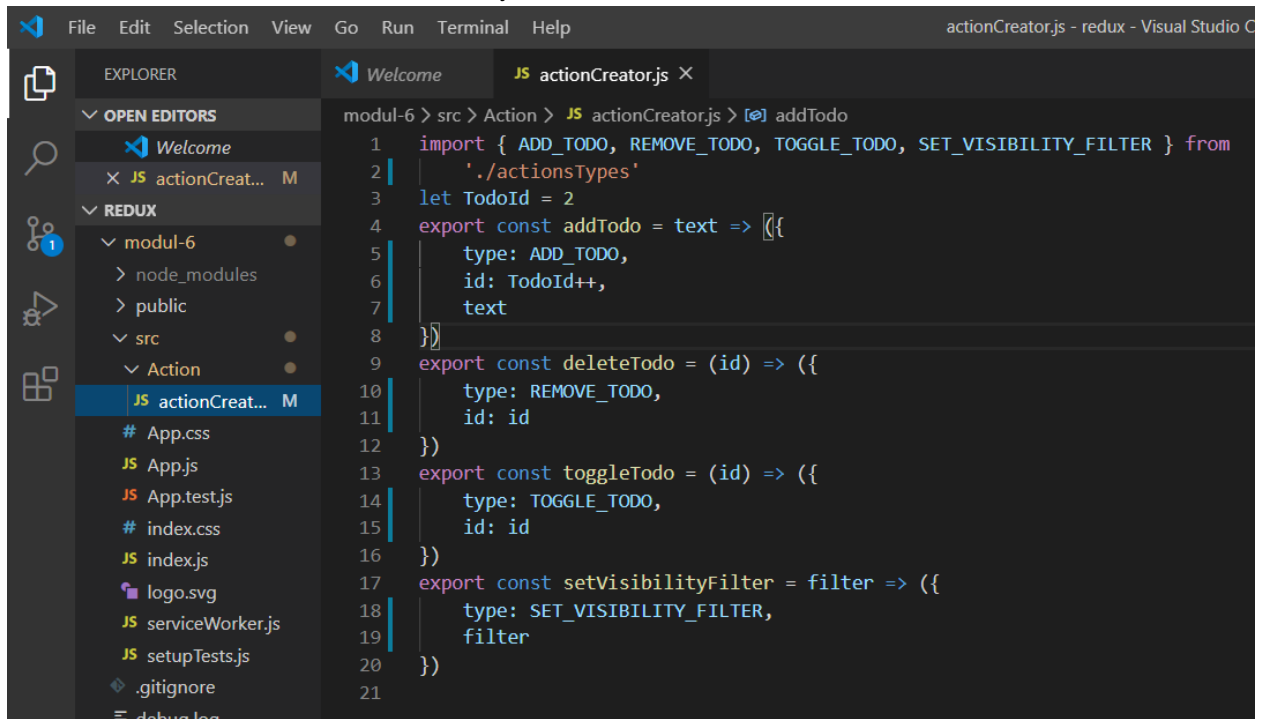
**PROGRAM STUDI D-IV TEKNIK INFORMATIKA
JURUSAN TEKNOLOGI INFORMASI
POLITEKNIK NEGERI MALANG
2020**

A. Praktikum

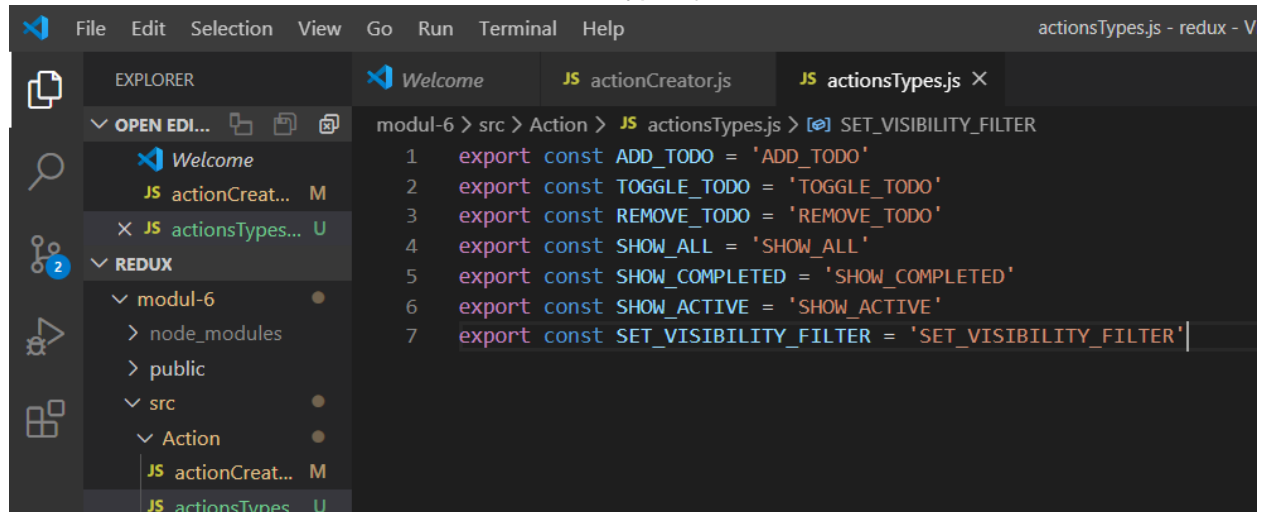
1. Buat Folder dalam src yaitu Action



2. Buat file dan beri nama actionCreator.js



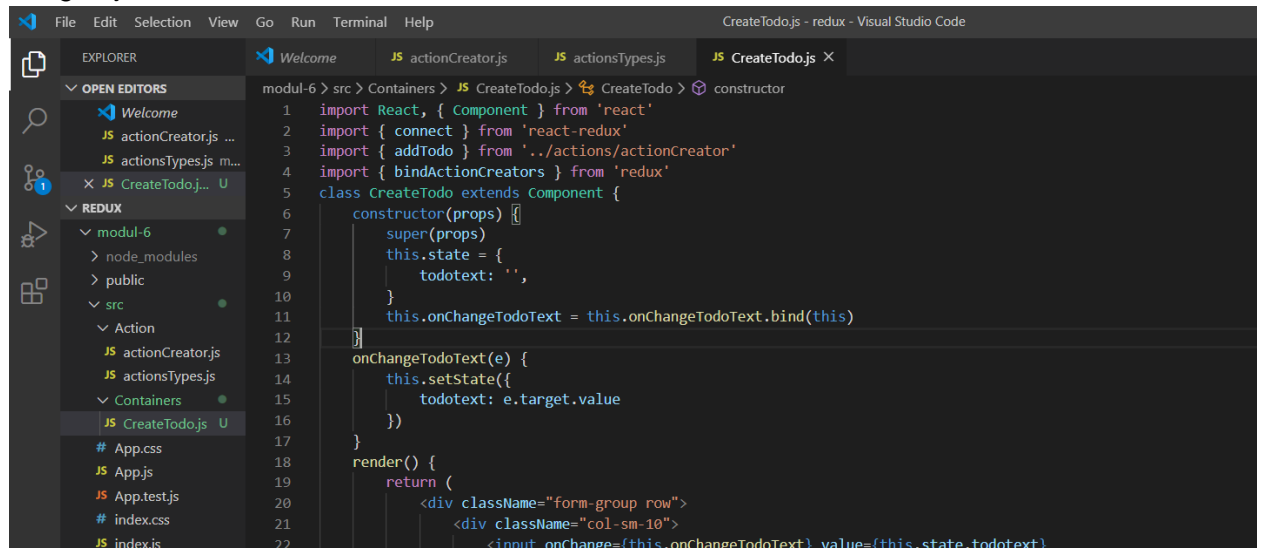
3. Masih dalam Folder Action buatlah file actionTypes.js



The screenshot shows the Visual Studio Code interface with the Explorer panel on the left. The 'Action' folder is selected under 'src'. The main editor displays the 'actionsTypes.js' file with the following code:

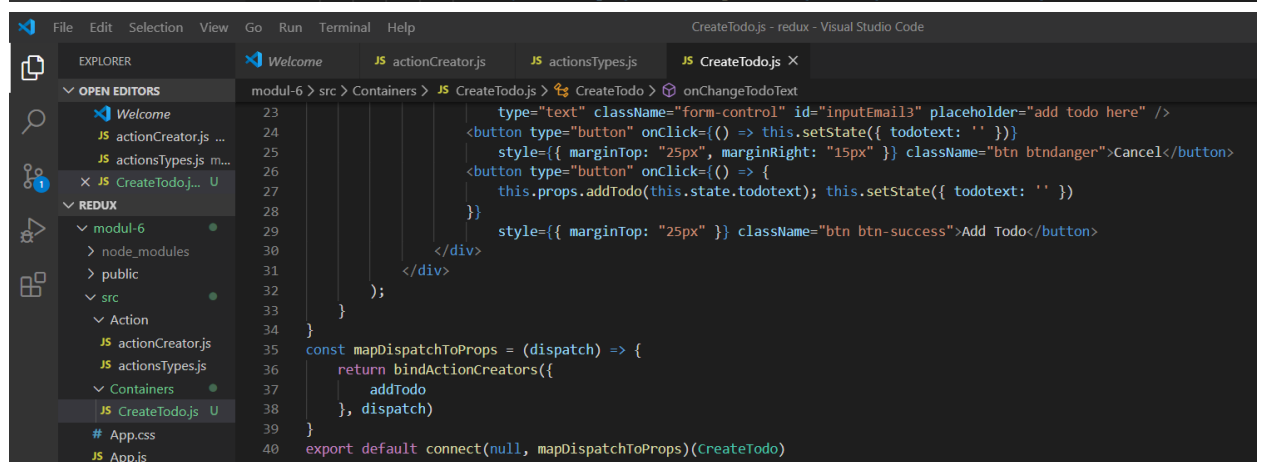
```
1 export const ADD_TODO = 'ADD_TODO'
2 export const TOGGLE_TODO = 'TOGGLE_TODO'
3 export const REMOVE_TODO = 'REMOVE_TODO'
4 export const SHOW_ALL = 'SHOW_ALL'
5 export const SHOW_COMPLETED = 'SHOW_COMPLETED'
6 export const SHOW_ACTIVE = 'SHOW_ACTIVE'
7 export const SET_VISIBILITY_FILTER = 'SET_VISIBILITY_FILTER'
```

4. Kemudian dalam folder src buatlah folder dengan nama containers dan buatlah file dengan judul CreateTodo



The screenshot shows the Visual Studio Code interface with the Explorer panel on the left. The 'Containers' folder is selected under 'src'. The main editor displays the 'CreateTodo.js' file with the following code:

```
1 import React, { Component } from 'react'
2 import { connect } from 'react-redux'
3 import { addTodo } from '../actions/actionCreator'
4 import { bindActionCreators } from 'redux'
5 class CreateTodo extends Component {
6   constructor(props) {
7     super(props)
8     this.state = {
9       todotext: '',
10     }
11     this.onChangeTodoText = this.onChangeTodoText.bind(this)
12   }
13   onChangeTodoText(e) {
14     this.setState({
15       todotext: e.target.value
16     })
17   }
18   render() {
19     return (
20       <div className="form-group row">
21         <div className="col-sm-10">
22           <input onChange={this.onChangeTodoText} value={this.state.todotext}
```



The screenshot shows the continuation of the 'CreateTodo.js' file in the main editor. The code continues from the previous block:

```
23     type="text" className="form-control" id="inputEmail3" placeholder="add todo here" />
24     <button type="button" onClick={() => this.setState({ todotext: '' })}
25       style={{ marginTop: "25px", marginRight: "15px" }} className="btn btn-danger">Cancel</button>
26     <button type="button" onClick={() => {
27       this.props.addTodo(this.state.todotext); this.setState({ todotext: '' })
28     }}
29     style={{ marginTop: "25px" }} className="btn btn-success">Add Todo</button>
30   </div>
31 </div>
32 );
33 }
34 }
35 const mapDispatchToProps = (dispatch) => {
36   return bindActionCreators({
37     addTodo
38   }, dispatch)
39 }
40 export default connect(null, mapDispatchToProps)(CreateTodo)
```

5. Masih dalam folder containers buatlah file dengan judul Table.js

```
1 import React, { Component } from "react";
2 import { connect } from "react-redux";
3 import {
4   deleteTodo,
5   toggleTodo,
6   setVisibilityFilter
7 } from "../actions/actionCreator";
8 import { SHOW_ALL, SHOW_COMPLETED, SHOW_ACTIVE } from "../actions/actionTypes";
9 import { bindActionCreators } from "redux";
10 class Table extends Component {
11   render() {
12     return (
13       <div className="col-lg-10 offset-lg-1 col-md-10 col-sm-12 col-xs-12">
14         <nav style={{ marginTop: "60px" }}>
15           <ol className="breadcrumb">
16             <li className={"breadcrumb-item " + (this.props.visibilityFilter === SHOW_ALL ? 'active' : '')}>
17               <span>All</span></li>
18             <li className={"breadcrumb-item " + (this.props.visibilityFilter === SHOW_COMPLETED ? 'active' : '')}>
19               <span>Completed</span></li>
20             <li className={"breadcrumb-item " + (this.props.visibilityFilter === SHOW_ACTIVE ? 'active' : '')}>
21               <span>Active</span></li>
22           </ol>
23         </nav>
24         {this.props.todos.length !== 0 ? (
25           <table
26             style={{ marginTop: "60px" }}
27             className="table table-hover table-dark">
28             <thead>
29               <tr>
30                 <th scope="col">Todos</th>
31                 <th scope="col">Actions</th>
32               </tr>
33             </thead>
34             <tbody>
35               {this.props.todos.map(todo => (
36                 <tr key={todo.id}>
37                   <td style={{ textDecoration: todo.completed ? "line-through" : "none" }}>
38                     {todo.text} {todo.completed === true ? "(completed)" : ""}
39                   </td>
40                   <td>
41                     <span
42                       className="fas fa-minus-circle"
43                       onClick={() => this.props.deleteTodo(todo.id)}
44                       style={{ color: "white", fontSize: "20pt", marginRight: "20px" }}
45                     />
46                     <span
47                       className="fas fa-check-circle"
48                       onClick={() => this.props.toggleTodo(todo.id)}
49                       style={{ color: "white", fontSize: "20pt" }}
50                     />
51                   </td>
52                 </tr>
53               ))}
54             </tbody>
55           </table>
56         ) : null}
57       </div>
58     );
59   }
60 }
```

The image displays two sequential screenshots of a Visual Studio Code editor window, showing the development of a Redux application. The editor is titled "Table.js - redux - Visual Studio Code".

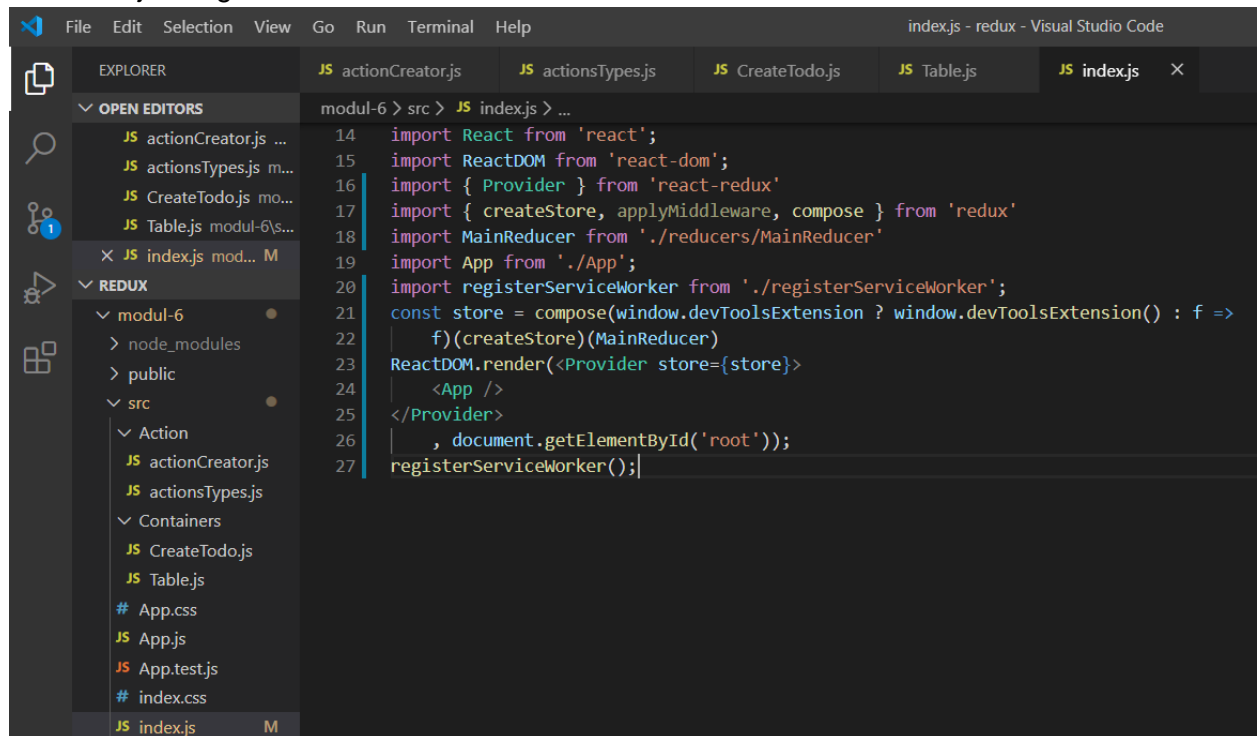
Top Screenshot: The Explorer sidebar on the left shows the project structure, including "modul-6" and "Containers". The "JS Table.js" file is open in the editor. The code shows a table structure with a conditional alert message:

```
61 </tbody>
62 </table>
63 ) : (
64 <div
65   style={{ marginTop: "50px" }}
66   className="col-lg-10 col-md-10 col-xs-12 col-sm-12 offset-lg-1"
67 >
68   <div className="alert alert-danger" role="alert">
69     Todo List is empty or Filter results show no results
70   </div>
71 </div>
72 )
73 }{" "}
74 </div >
75 );
76 }
77 }
78 const getVisibleTodos = (todos, filter) => {
79   switch (filter) {
80     case SHOW_ALL:
81       return todos;
82     case SHOW_COMPLETED:
83       return todos.filter(t => t.completed);
84     case SHOW_ACTIVE:
85       return todos.filter(t => !t.completed);
86     default:
87       throw new Error("Unknown filter: " + filter);
88   }
89 };
90 const mapStateToProps = state => {
```

Bottom Screenshot: The same "JS Table.js" file is shown, but with additional code added to the bottom:

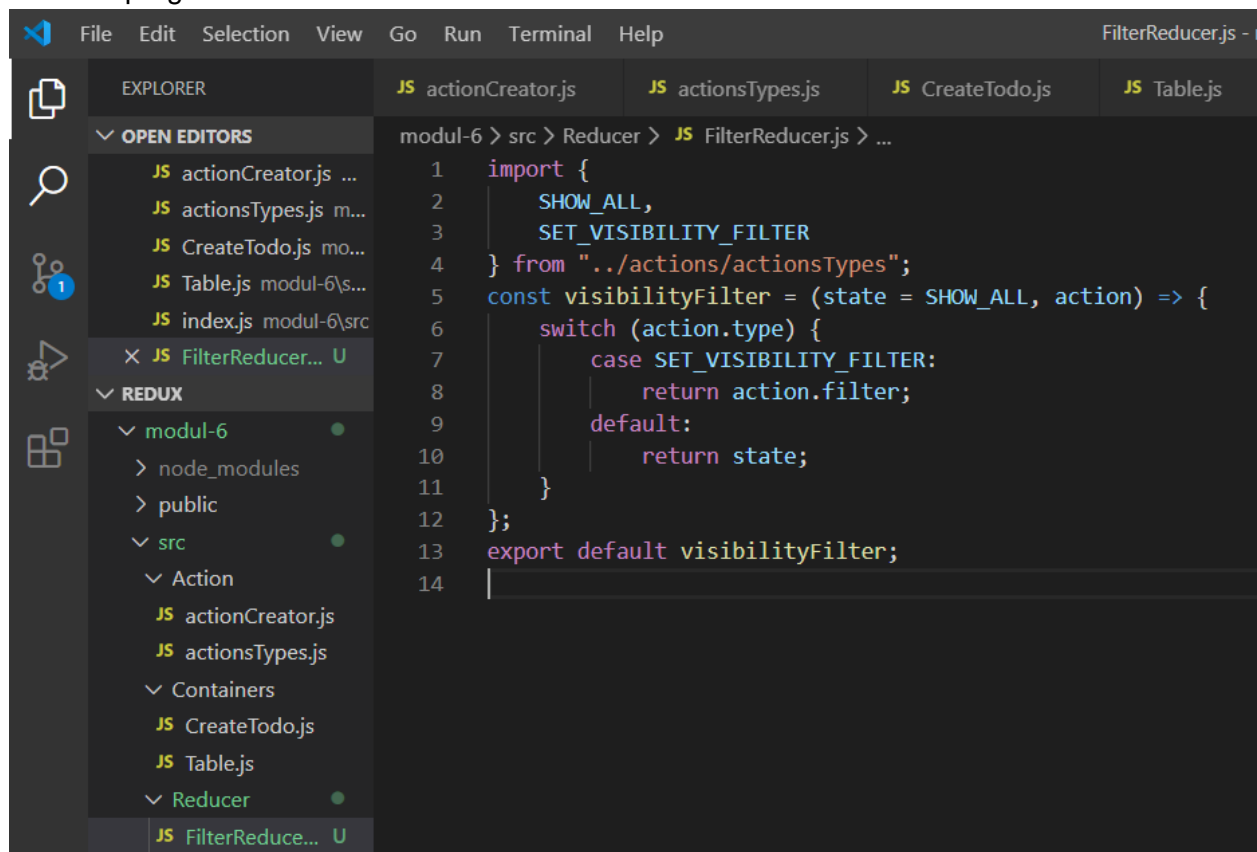
```
91   return {
92     todos: getVisibleTodos(state.todos, state.visibilityFilter),
93     visibilityFilter: state.visibilityFilter
94   };
95 };
96 const mapDispatchToProps = dispatch => {
97   return bindActionCreators(
98     {
99       deleteTodo,
100       toggleTodo,
101       setVisibilityFilter
102     },
103     dispatch
104   );
105 };
106 export default connect(mapStateToProps, mapDispatchToProps)(Table);
```

6. Edit index.js dengan source code berikut ini



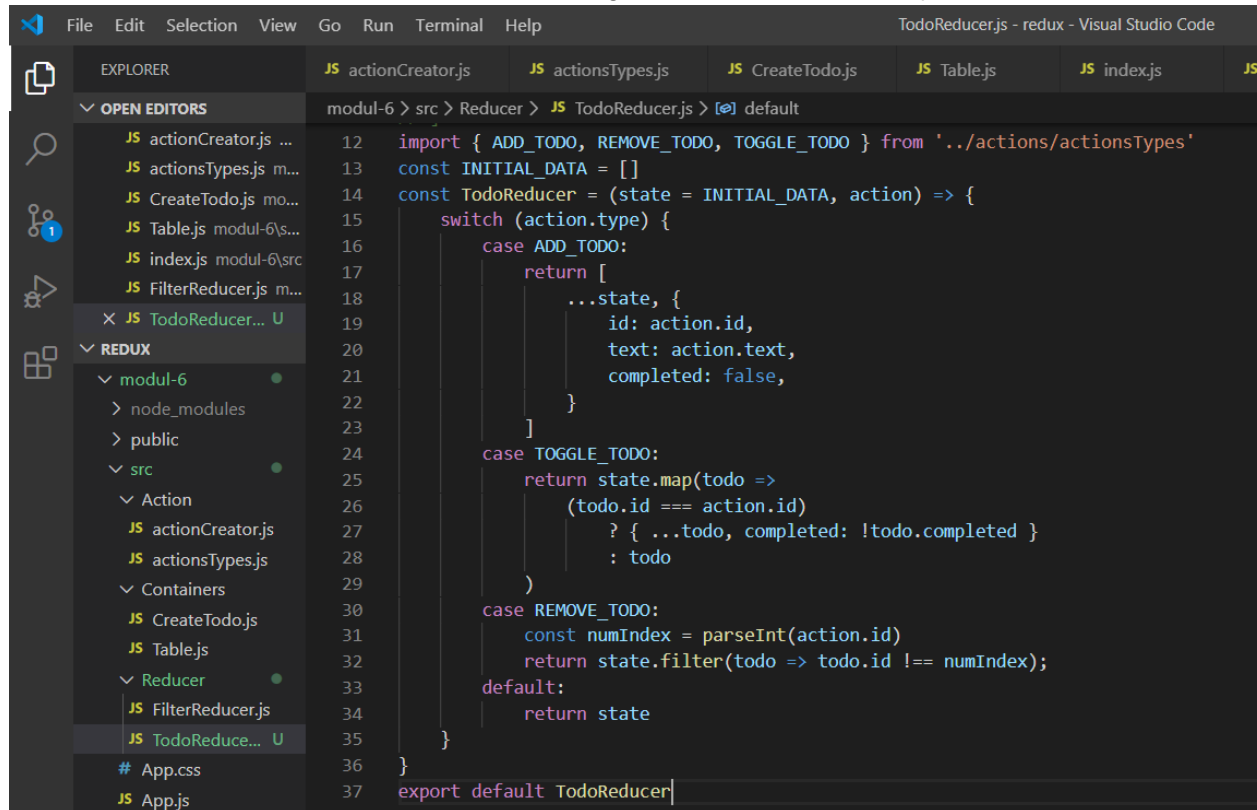
```
14 import React from 'react';
15 import ReactDOM from 'react-dom';
16 import { Provider } from 'react-redux'
17 import { createStore, applyMiddleware, compose } from 'redux'
18 import MainReducer from './reducers/MainReducer'
19 import App from './App';
20 import registerServiceWorker from './registerServiceWorker';
21 const store = compose(window.devToolsExtension ? window.devToolsExtension() : f =>
22   f)(createStore)(MainReducer)
23 ReactDOM.render(<Provider store={store}>
24   <App />
25 </Provider>
26   , document.getElementById('root'));
27 registerServiceWorker();
```

7. Buat folder dalam src dengan nama reducers dan beri nama file FilterReducer.js dan ketikkan program dibawah ini :



```
1 import {
2   SHOW_ALL,
3   SET_VISIBILITY_FILTER
4 } from "../actions/actionTypes";
5 const visibilityFilter = (state = SHOW_ALL, action) => {
6   switch (action.type) {
7     case SET_VISIBILITY_FILTER:
8       return action.filter;
9     default:
10      return state;
11   }
12 };
13 export default visibilityFilter;
```

8. Masih didalam folder reducers buatlah file dengan nama `TodoReducer.js`

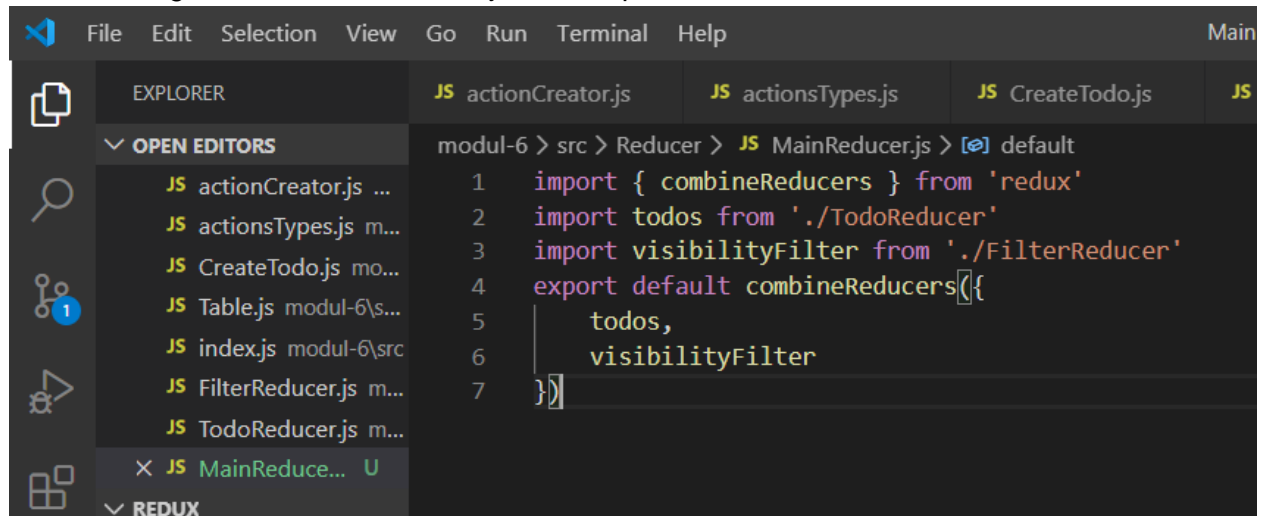


```
File Edit Selection View Go Run Terminal Help
modul-6 > src > Reducer > JS TodoReducer.js > default

EXPLORER
  OPEN EDITORS
    JS actionCreator.js ...
    JS actionTypes.js m...
    JS CreateTodo.js mo...
    JS Table.js modul-6\src
    JS index.js modul-6\src
    JS FilterReducer.js m...
    X JS TodoReducer.js U
  REDUX
    modul-6
      node_modules
      public
      src
        Action
          JS actionCreator.js
          JS actionTypes.js
        Containers
          JS CreateTodo.js
          JS Table.js
        Reducer
          JS FilterReducer.js
          JS TodoReducer.js U
      App.css
      App.js

12 import { ADD_TODO, REMOVE_TODO, TOGGLE_TODO } from '../actions/actionTypes'
13 const INITIAL_DATA = []
14 const TodoReducer = (state = INITIAL_DATA, action) => {
15   switch (action.type) {
16     case ADD_TODO:
17       return [
18         ...state, {
19           id: action.id,
20           text: action.text,
21           completed: false,
22         }
23       ]
24     case TOGGLE_TODO:
25       return state.map(todo =>
26         (todo.id === action.id)
27           ? { ...todo, completed: !todo.completed }
28           : todo
29       )
30     case REMOVE_TODO:
31       const numIndex = parseInt(action.id)
32       return state.filter(todo => todo.id !== numIndex);
33     default:
34       return state
35   }
36 }
37 export default TodoReducer
```

9. Buat file dengan nama `MainReducer.js` dan simpan



```
File Edit Selection View Go Run Terminal Help
modul-6 > src > Reducer > JS MainReducer.js > default

EXPLORER
  OPEN EDITORS
    JS actionCreator.js ...
    JS actionTypes.js m...
    JS CreateTodo.js mo...
    JS Table.js modul-6\src
    JS index.js modul-6\src
    JS FilterReducer.js m...
    JS TodoReducer.js m...
    X JS MainReducer.js U
  REDUX
    modul-6
      node_modules
      public
      src
        Action
          JS actionCreator.js
          JS actionTypes.js
        Containers
          JS CreateTodo.js
          JS Table.js
        Reducer
          JS FilterReducer.js
          JS MainReducer.js U
          JS TodoReducer.js m...
      App.css
      App.js

1 import { combineReducers } from 'redux'
2 import todos from './TodoReducer'
3 import visibilityFilter from './FilterReducer'
4 export default combineReducers({
5   todos,
6   visibilityFilter
7 })
```

10. Hasil running

