

WEEK-6

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Screenshots

The screenshot displays a code editor with two files open. The top file, `SimpleCalculator.js`, contains a JavaScript function `Calculator()` that defines a `calculate()` function. This function checks for division by zero and returns an invalid operation message. It then updates the `result` element's text and returns a JSX element representing the calculator's UI. The UI includes a title, two input fields for numbers, a select menu for operators, and a calculate button. The bottom file, `App.js`, shows the import of the `Calculator` component and its rendering within the `App` component.

```
calculator-app > src > JS SimpleCalculator.js > ...
4   function Calculator() {
5     function calculate() {
22      result = num2 !== 0 ? num1 / num2 : 'Cannot divide by zero';
23      break;
24      default:
25      result = 'Invalid Operation';
26    }
27
28    document.getElementById('result').innerText = `Result: ${result}`;
29  }
30
31  return (
32    <div style={{ padding: '20px', border: '8px solid #ccc', width: '300px', backgro
33      <h2>Simple Calculator</h2>
34      <input type="number" id="num1" placeholder="First Number" style={{ width: '100%
35      <select id="operator" style={{ width: '100%', marginBottom: '10px' }}>
36        <option value="+">Add</option>
37        <option value="-">Subtract</option>
38        <option value="*">Multiply</option>
39        <option value="/">Divide</option>
40      </select>
41      <input type="number" id="num2" placeholder="Second Number" style={{ width: '100%
42      <button onClick={calculate} style={{ width: '100%', padding: '10px', marginBott
43      Calculate
1  import './App.css';
2  import React from 'react';
3
4  function Calculator() {
5    function calculate() {
6      const num1 = parseFloat(document.getElementById('num1').value);
7      const num2 = parseFloat(document.getElementById('num2').value);
8      const operator = document.getElementById('operator').value;
9      let result = 0;
10
11    switch (operator) {
12      case '+':
13        result = num1 + num2;
14        break;
15      case '-':
16        result = num1 - num2;
17        break;
18      case '*':
19        result = num1 * num2;
20        break;
21      case '/':
22        result = num2 !== 0 ? num1 / num2 : 'Cannot divide by zero';
```

calculator-app > src > JS SimpleCalculator.js > ...

```
4 function Calculator() {  
5   function calculate() {  
23     break;  
24     default:  
25     result = 'Invalid Operation';  
26   }  
27  
28   document.getElementById('result').innerText = `Result: ${result}`;  
29 }  
30  
31 return (  
32   <div style={{ padding: '20px', border: '8px solid #ccc', width: '300px', background-color: #f9f9f9 }}>  
33     <h2>Simple Calculator</h2>  
34     <input type="number" id="num1" placeholder="First Number" style={{ width: '100%' }}>  
35     <select id="operator" style={{ width: '100%', marginBottom: '10px' }}>  
36       <option value="+">Add</option>  
37       <option value="-">Subtract</option>  
38       <option value="*">Multiply</option>  
39       <option value="/">Divide</option>  
40     </select>  
41     <input type="number" id="num2" placeholder="Second Number" style={{ width: '100%' }}>  
42     <button onClick={calculate} style={{ width: '100%', padding: '10px', marginBottom: '10px' }}>  
43       Calculate  
44     </button>  
    </div>  
  )
```

Ports - 1 forwarded port

Simple Calculator

Result: 33

Simple Calculator



Calculate

Result: -2

Simple Calculator



Calculate

Result: 399

Simple Calculator

Result: 9.428571428571429

calculator-app / src / `index.js` / ...

```
1  import React from 'react';
2  import ReactDOM from 'react-dom/client';
3  import './index.css';
4  import Calculator from './SimpleCalculator';
5
6  const root = ReactDOM.createRoot(document.getElementById('root'));
7  root.render(
8    <React.StrictMode>
9      <Calculator />
10    </React.StrictMode>
11  );
12
13
```

Short explanation how the code works

The calculator is built using Calculator, a helpful React component. This component uses a function called `calculate()` to perform all arithmetic operations. When the user enters two numbers and selects an operator, the `calculate()` function uses `document` to retrieve the values.`getElementById` and converts them to numbers using `parseFloat`. After confirming which operator (+, -, ×, or ÷) was chosen, a switch statement performs

the required computation. The result is then displayed on the screen by updating the text inside the `<p>` element with the id result.