

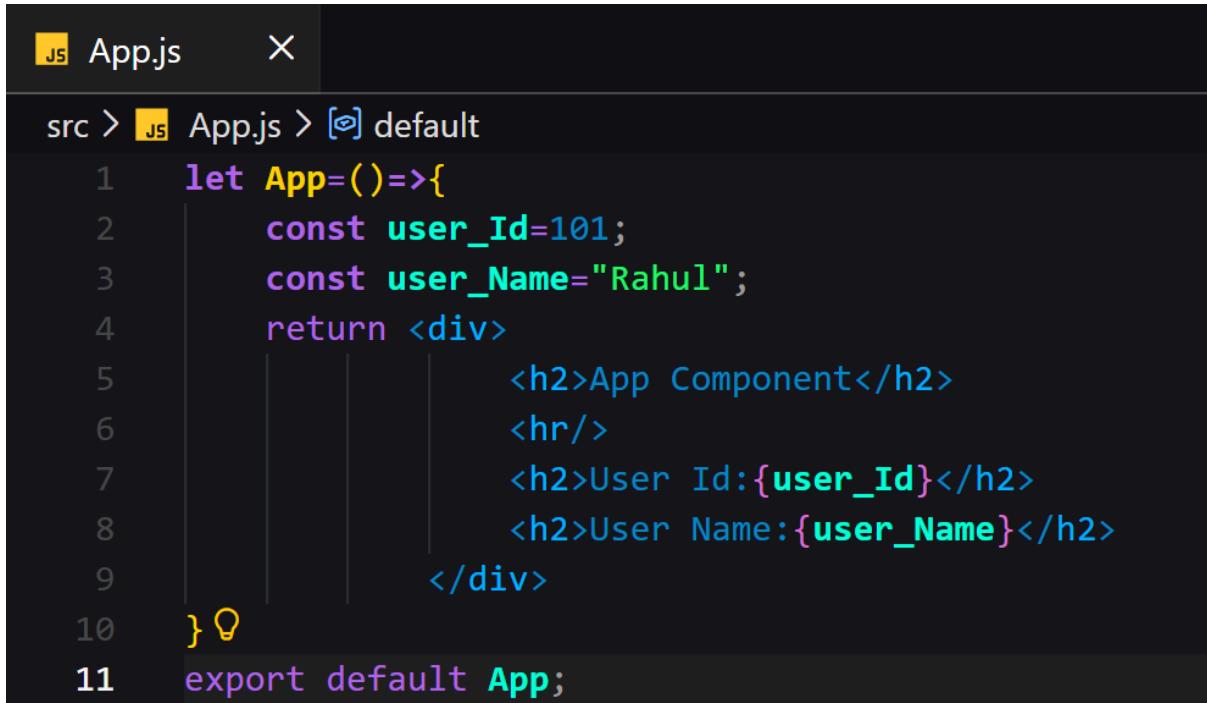
In **React**, an *expression* is any piece of JavaScript code that returns a value — and you can embed these expressions inside JSX using curly braces `{ }`.

### Simple Definition

**React Expression** = JavaScript code written inside `{ }` in JSX that returns a value.

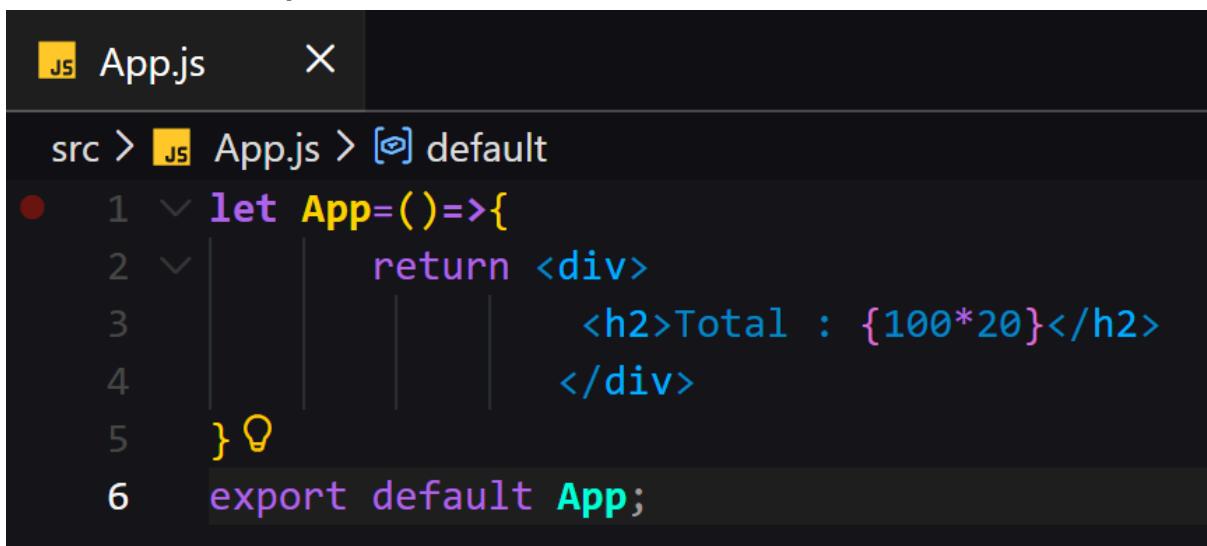
### Examples of React Expressions

#### 1. Variables inside JSX



```
App.js      X
src > App.js > default
1 let App=()=>{
2   const user_Id=101;
3   const user_Name="Rahul";
4   return <div>
5     <h2>App Component</h2>
6     <hr/>
7     <h2>User Id:{user_Id}</h2>
8     <h2>User Name:{user_Name}</h2>
9   </div>
10 }
11 export default App;
```

#### 2. Mathematical expressions



```
App.js      X
src > App.js > default
● 1 let App=()=>{
2   return <div>
3     <h2>Total : {100*20}</h2>
4   </div>
5 }
6 export default App;
```

### 3. Function calls

The screenshot shows a code editor window with a dark theme. The file is named 'App.js'. The code defines a 'greet' function that returns a string. It then defines an 'App' component as a function that returns a div containing an h2 element with the result of calling the 'greet' function. Finally, it exports the 'App' component.

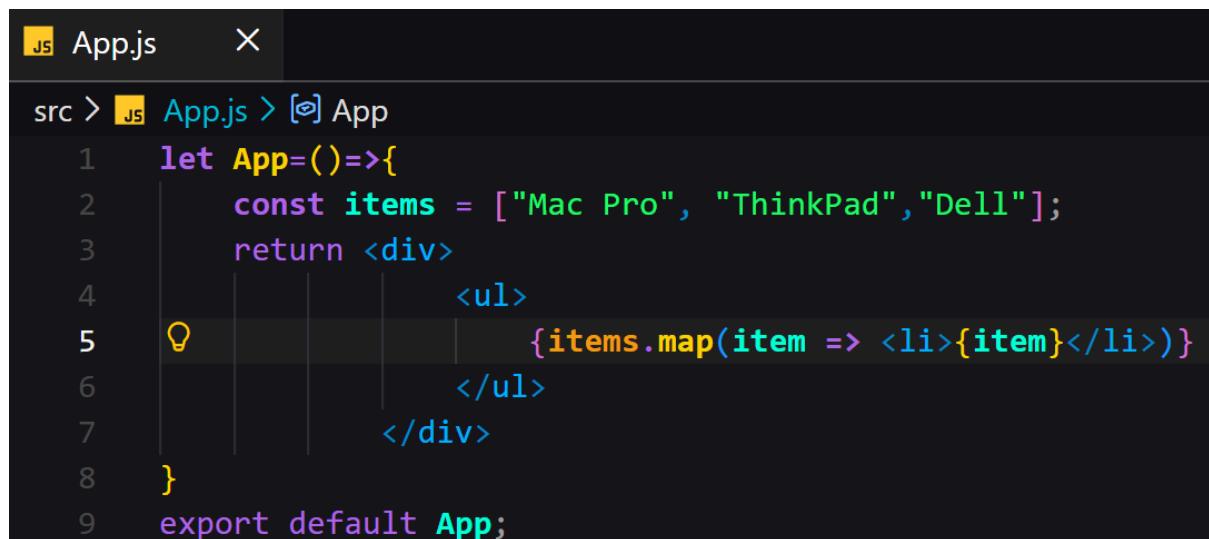
```
src > App.js > default
1 let greet = ()=>{
2   return "Good Morning..";
3 }
4 let App=()=>{
5   return <div>
6     <h2>{greet()}</h2>
7   </div>
8 }
9 export default App;
```

### 4. Conditional expressions (ternary)

The screenshot shows a code editor window with a dark theme. The file is named 'App.js'. The code defines an 'App' component as a function. Inside, it checks if 'isLoggedIn' is true, returning 'Welcome!' if true or 'Please login' if false. Finally, it exports the 'App' component.

```
src > App.js > default
1 let App=()=>{
2   const isLoggedIn = true;
3   return <div>
4     <p>{isLoggedIn ? "Welcome!" : "Please login"}</p>
5   </div>;
6 }
7 export default App;
```

## 5. Array operations



```
App.js      X
src > App.js > App
1 let App=()=>{
2   const items = ["Mac Pro", "ThinkPad", "Dell"];
3   return <div>
4     <ul>
5       {items.map(item => <li>{item}</li>)}
6     </ul>
7   </div>
8 }
9 export default App;
```

## ✖ What React expressions cannot contain

React does NOT allow statements inside JSX, such as:

- `if` statements
- `for` loops
- `while` loops
- Variable declarations (`let`, `const`, `var`)

## 💬 Summary

Feature	Allowed?	Example
Expressions	✓ Yes	{a + b}, {name}, {fn()}
Statements	✗ No	if () {}, for() {}, let x = 10