

Lifting State Up in React

1. Meaning:

In React, “**lifting state up**” means moving a shared state to the nearest common parent component so that multiple child components can share and synchronize the same data. This ensures that there is only one source of truth for that data.

2. Why Lift State Up?

To share data between sibling components. To avoid duplication of state. To ensure one source of truth for data. To make data flow predictable (parent to child).

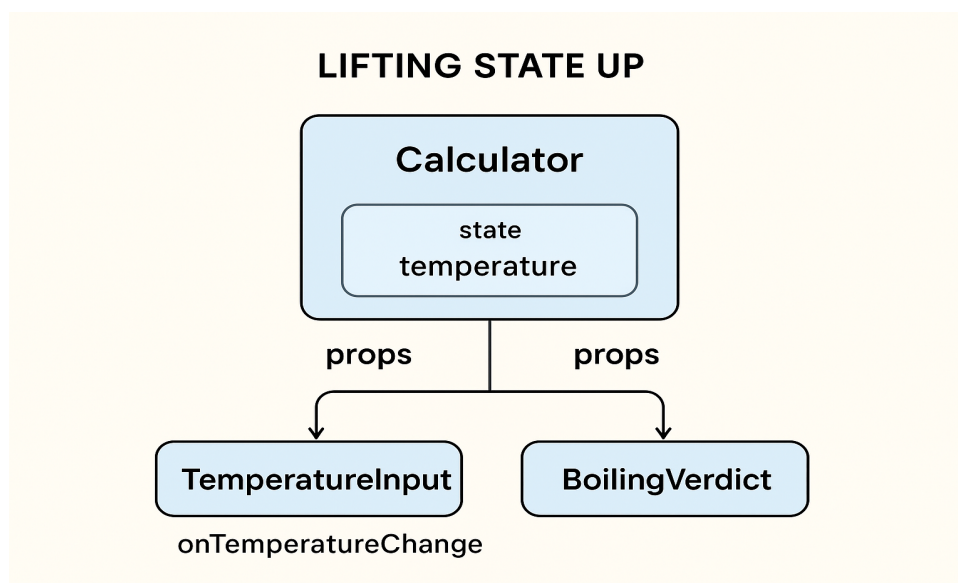
3. Example:

```
function TemperatureInput({ temperature, onTemperatureChange }) { return ( Enter temperature in Celsius: onTemperatureChange(e.target.value)} /> ); } function BoilingVerdict({ temperature }) { return ( {temperature >= 100 ? "Water will boil!" : "Water will not boil."} ); } function Calculator() { const [temperature, setTemperature] = React.useState(""); return ( ); } export default Calculator;
```

4. How It Works:

- The 'temperature' state is lifted up from TemperatureInput to Calculator.
- The Calculator component passes 'temperature' and 'setTemperature' as props to children.
- When input changes, the parent's state updates, and both components re-render with consistent data.

5. Visual Diagram:



6. Key Takeaway:

“Lifting state up” means centralizing shared state in the nearest parent component so that all children using that data remain consistent and synchronized.