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| **Pure Component**  React assumes that every component you write is a pure function.  This means that React components you write must always return the same JSX given the same inputs. | |
| function Recipe({ drinkers }) {  return (  <ol>  <li>Boil {drinkers} cups of water.</li>  <li>Add {drinkers} spoons of tea and {0.5 \* drinkers} spoons of spice.</li>  <li>Add {0.5 \* drinkers} cups of milk to boil and sugar to taste.</li>  </ol>  );  }  export default function App() {  return (  <section>  <h1>Spiced Chai Recipe</h1>  <h2>For two</h2>  <Recipe drinkers={2} />  <h2>For a gathering</h2>  <Recipe drinkers={4} />  </section>  );  } | A recipe with black text  Description automatically generated  When you pass drinkers={2} to Recipe, it will return JSX containing 2 cups of water. Always.  If you pass drinkers={4}, it will return JSX containing 4 cups of water. Always. |
| let guest = 0;  function Cup() {  // Bad: changing a preexisting variable!  guest = guest + 2;  return <h2> Tea cup for guest #{guest} </h2>;  }  export default function TeaSet() {  return (  <>  <Cup />  <Cup />  <Cup />  </>  );  } | A white background with black text  Description automatically generated  Strict mode in index.js |
| function Cup({ guest }) {  return <h2>Tea cup for guest #{guest}</h2>;  }  export default function TeaSet() {  return (  <>  <Cup guest={1} />  <Cup guest={2} />  <Cup guest={3} />  </>  );  } | A white background with black text  Description automatically generated |
| function Cup({ guest }) {  return <h2>Tea cup for guest #{guest}</h2>;  }  export default function TeaGathering() {  let cups = [34,56,78,"Gaurav Raj", <Cup key={1} guest={1} /> ];    return cups;  } | A close-up of a sign  Description automatically generated  A screenshot of a computer program  Description automatically generated |
| function Cup({ guest }) {  return <h2>Tea cup for guest #{guest}</h2>;  }  export default function TeaGathering() {  let cups = [];  for (let i = 1; i <= 4; i++) {  cups.push(<Cup key={i} guest={i} />);  }  return cups;  } | A group of black text  Description automatically generated |
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