



Questions:

1. How would you set up a new React project using tools like Create React App or Vite?

Using Create React App:

```
npx create-react-app my-app  
cd my-app  
npm start
```

Using Vite (faster & modern):

```
npm create vite@latest my-app  
cd my-app  
npm install  
npm run dev
```

These tools automatically create the project structure and install required dependencies.

2. What is the role of package.json in a React project?

- Stores **project metadata** (name, version)
- Lists **dependencies** (React, React DOM, etc.)
- Contains **scripts** like `npm start`, `npm build`
- Helps npm manage and install required packages

Without `package.json`, npm commands will not work.

3. How do you create a functional component in React?

A functional component is created using a **JavaScript function** that returns JSX.

```
function Welcome() {  
  return <h1>Welcome to React</h1>;  
}  
  
export default Welcome;
```

4. How are components rendered inside the main App component?

- Components are imported into `App.js`
- Used as **custom JSX tags**

Example:

```
import Welcome from "./Welcome";
```

```
function App() {  
  return (  
    <div>  
      <Welcome />  
    </div>  
  );  
}
```

```
export default App;
```

5. What are the benefits of breaking the UI into small reusable components?

Improves **code reusability**

Makes code **easy to maintain**

Enhances **readability**

Allows **independent testing**

Speeds up development