**1) What is Redux?**

* Redux is a predictable state container for JavaScript apps, primarily used with frameworks like React for building user interfaces.
* It follows principles of a single source of truth, read-only state, and pure functions to handle state changes.
* It's commonly used with frameworks like React to build scalable and maintainable applications.

**2) What is Redux Thunk used for?**

* Redux Thunk is a middleware for Redux, a popular state management library for JavaScript applications, typically used with React.
* It perform asynchronous operations, such as API calls or dispatching multiple actions, before dispatching the actual action objects to update the Redux store.
* Thunks allow you to separate complex business logic from your UI components.
* You can use thunks to handle asynchronous operations like fetching data from APIs.

**3) What is Pure Component? When to use Pure Component over Component?**

* A PureComponent is a way to optimize React applications.
* If your state or props are immutable (i.e., their values don’t change), using PureComponent ensures that unnecessary re-renders are avoided.
* When dealing with flat data structures (without nested objects or arrays), PureComponent can be beneficial.

**4) What is the second argument that can optionally be passed tosetState and what is its purpose?**

* The second argument that can optionally be passed to setState is a callback function which gets called immediately after the setState is completed and the components get re-rendered.
* When you call setState to update the state of a component, React performs the state update asynchronously. This means that the component may not immediately re-render with the updated state.
* The callback function serves as a way to carry out additional operations after the state update is applied and the component has re-rendered.
* By using the callback, you can ensure that certain actions occur only after the state has been successfully updated.