**Q**. What is Redux?

**A**. Redux is an open-source JavaScript library used to manage application state. React uses Redux for building the user interface. It was first introduced by **Dan Abramov** and **Andrew Clark** in **2015**.

React Redux is the official React binding for Redux. It allows React components to read data from a Redux Store, and dispatch **Actions** to the **Store** to update data. Redux helps apps to scale by providing a sensible way to manage state through a unidirectional data flow model. React Redux is conceptually simple. It subscribes to the Redux store, checks to see if the data which your component wants have changed, and re-renders your component.

Redux was inspired by Flux. Redux studied the Flux architecture and omitted unnecessary complexity.

* Redux does not have Dispatcher concept.
* Redux has an only Store whereas Flux has many Stores.
* The Action objects will be received and handled directly by Store.

**Q**. What is Redux Thunk used for?

**A**. For Redux specifically, "thunks" are a pattern of writing functions with logic inside that can interact with a Redux store's dispatch and getState methods. Using thunks requires the redux-thunk middleware to be added to the Redux store as part of its configuration.

**Q**. What is Pure Component? When to use Pure Component over Component?

**A**. It is one of the most significant ways to optimize React applications. By using the pure component, there is no need for shouldComponentUpdate() Lifecycle Method as ReactJS Pure Component Class compares current state and props with new props and states to decide whether the component should re-render or Not.

You may choose React.PureComponent over *React.Component* if any of the below conditions is satisfied:

* State/Props should be an immutable object
* State/Props should not have a hierarchy
* You should call forceUpdate() when data changes

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

**A**. 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.

If you want your program to update the value of a state using setState and then perform certain actions on the updated value of state then you must specify those actions in a function which should be the second argument of the setState. If we would not do so then those actions will be performed on the previous value of state because of**asynchronous**nature of setState.