**Question 1: What is Redux, and why is it used in React?**

Redux is a state management library that stores app data in a centralized store, making it easier to manage and share state across components.

Core Concepts:

Actions – Objects that describe what should happen

Reducers – Functions that update the state based on actions.

Store – The centralized place where state is stored and updated.

Why use Redux?

Avoids prop drilling (passing data through multiple components).

Makes state predictable and easy to debug.

**Question 2: How is Recoil simpler than Redux?**

Recoil is a lightweight state management library for React, with less setup than Redux.

Key Differences:

Redux setup Requires actions, reducers, store

Recoil Uses simple atoms

Redux complexity is more boilerplate

Recoil is less code easy to use

Redux performance updates whole store

Recoil updates only necessary components

Why use Recoil?

Less code, no reducers/actions needed.

Better performance, only re-renders affected components.

Simpler API, works like useState().

Recoil for small apps, Redux for large-scale applications.