**Question 1: What is JSX in React.js? Why is it used?**

**Answer:** JSX (JavaScript XML) is a syntax extension for JavaScript used in React to describe the UI structure. It allows developers to write HTML-like code inside JavaScript.

**Why is it used?**

* Makes UI code more readable and maintainable.
* Allows embedding JavaScript expressions inside HTML-like syntax.
* Transpiles into standard JavaScript using Babel, ensuring compatibility with browsers.
* Enhances development speed and efficiency by keeping markup and logic together.

**Question 2: How is JSX different from regular JavaScript? Can you write JavaScript inside JSX?**

**Answer:**  
**Differences from Regular JavaScript:**

* JSX allows writing HTML-like syntax inside JavaScript, while regular JavaScript does not.
* JSX needs to be compiled using Babel before being interpreted by the browser.
* JSX elements must have a **single parent element**, unlike regular JavaScript.

**Can you write JavaScript inside JSX?**  
Yes, JavaScript expressions can be written inside JSX using **curly braces {}**. Example:

const name = "John";

const element = <h1>Hello, {name}!</h1>;

Here, {name} dynamically inserts the value inside the JSX.

**Question 3: Discuss the importance of using curly braces {} in JSX expressions.**

**Answer:**  
Curly braces {} in JSX allow embedding JavaScript expressions inside JSX elements.

**Importance:**

* Used to insert dynamic values (e.g., variables, functions, calculations).
* Allows conditional rendering using ternary operators.
* Enables inline styles and function calls within JSX.

**Example:**

const age = 25;

const element = <p>{age >= 18 ? "Adult" : "Minor"}</p>;

Here, {} helps evaluate the JavaScript condition dynamically.