## Define JSX

JSX (JavaScript XML) is a syntax extension for JavaScript, commonly used with React to describe what the UI should look like. It allows you to write HTML-like code inside JavaScript, making it easier to create and visualize UI components.

## Explain about ECMA Script

ECMAScript (often abbreviated as ES) is the standard specification that defines the core features of JavaScript.

* JavaScript is an implementation of the ECMAScript standard.
* It’s maintained by ECMA International, and the official specification is called ECMA-262.
* Each version of ECMAScript brings new features, syntax improvements, and better performance

## Explain React.createElement()

React.createElement() is the core function that React uses to create virtual DOM elements behind the scenes, ie,

**const element = <h1>Hello, world!</h1>;** ->gets compiled to -> **const element = React.createElement("h1", null, "Hello, world!");**

## Explain how to create React nodes with JSX

In React, **JSX** (JavaScript XML) is the most common way to **create React nodes (elements)** — these are objects that describe what the user want to appear in the UI.

Basic syntax: const element = <h1>Hello, React!</h1>;

## Define how to render JSX to DOM

To display (or "render") JSX on a web page, we need to use **ReactDOM** from the react-dom package. This connects the JSX components to a real HTML element in the DOM, ie, import ReactDOM from "react-dom/client";

Example:

import React from "react";

import ReactDOM from "react-dom/client";

const App = () => {

return <h1>Hello from JSX!</h1>;

};

const root = ReactDOM.createRoot(document.getElementById("root"));

root.render(<App />);

## Explain how to use JavaScript expressions in JSX

JSX lets us use embed JavaScript expressions directly into our UI code using curly braces {}.

Example:

<h1>Hello, {name}!</h1>

Here, {name} is a JavaScript expression that gets evaluated and rendered inside the JSX.

## Explain how to use inline CSS in JSX

In JSX, inline CSS styles are applied using the style attribute, but with a few key differences from HTML. Example:

<div style={{ color: "red", fontSize: "20px" }}>Hello</div>

Here, the outer {} is for JSX expression and the inner {} is a JavaScript object containing CSS properties.