Lab 1 - React Intro

1. How does JSX differ from HTML?

JSX is a powerful extension of JavaScript that allows developers to write UI code in a way that closely resembles HTML but also integrates seamlessly with JavaScript, allowing for dynamic content and logic within the markup.

2. Why is JSX used in React?

JSX is used in React because it:

- Enhances readability and ease of use by providing a familiar HTML-like syntax.
- Seamlessly integrates JavaScript expressions for dynamic content and logic.
- Encourages a component-based architecture, promoting reusability and maintainability.
- Optimizes performance by utilizing a virtual DOM.

3. Can you embed JavaScript expressions in JSX? If so, how?

You can embed JavaScript expressions in JSX using curly braces {}. This allows you to include dynamic content, calculations, or variables directly within your JSX markup.

4. How do you write comments in JSX?

You can write comments in JSX by enclosing them within curly braces and using JavaScript-style comments {/* */}.

5. Explain the significance of curly braces {} in JSX.

In JSX, curly braces {} are used to embed JavaScript expressions, variables, or functions within the markup. This allows for dynamic content and logic to be included directly within JSX elements, making it possible to integrate JavaScript seamlessly with HTML-like syntax.

6. Can JSX be directly rendered to the DOM?

No, JSX cannot be directly rendered to the DOM. It needs to be transpiled into JavaScript using tools like Babel before it can be rendered in the browser. Once transpiled, JSX elements are converted into regular JavaScript function calls, which then manipulate the DOM using methods like ReactDOM.render().

7.What is the purpose of Babel in relation to JSX?

Babel is used to transpile JSX code into plain JavaScript code that browsers can understand.