**JSX Basic Syntax**

**🔤 What is JSX?**

* JSX = **JavaScript XML**
* Lets you write **HTML-like code inside JavaScript**
* JSX gets compiled to regular JS using React.createElement()

**✅ Declaring Multiple Variables**

const name = "Ali";

const age = 18;

const isStudent = true;

🧠 *Declare separate variables using const, let, or var*

const name = "Ali", age = 18, isStudent = true;

🧠 *Declare multiple variables in a single statement (comma-separated)*

**Expressions in JSX**

const score = 5 + 5;

const message = <h2>Score is {score}</h2>;

🧠 *JS expressions (like math, variables) can be used inside {} in JSX*

**📦 Multiline JSX (Wrap in Parentheses)**

const list = (

<ul>

<li>Apples</li>

<li>Bananas</li>

<li>Cherries</li>

</ul>

);

🧠 *Use parentheses to wrap multi-line JSX code blocks*

**🧩 Top-Level Wrapper (Required)**

const msg = (

<div>

<p>Hello</p>

<p>World</p>

</div>

);

🧠 *JSX must return* ***one single parent element*** *— like div*

**🧩 Or Use a Fragment Instead**

const msg = (

<>

<p>Hello</p>

<p>World</p>

</>

);

🧠 *Use fragments (<> </>) to avoid unnecessary wrapper elements*

**🔒 Self-Closing Tags**

<input type="text" />

<img src="cat.jpg" />

<br />

🧠 *Empty tags must be self-closed in JSX*

**🎨 className Instead of class**

<h1 className="title">Hello</h1>

🧠 *Use className instead of class (JS reserves class keyword)*

**🧮 Conditional Rendering**

**Option 1: if statement**

const x = 5;

let msg = "Goodbye";

if (x < 10) msg = "Hello";

const element = <h1>{msg}</h1>;

🧠 *Use if logic outside JSX and insert result with {}*

**Option 2: Ternary**

const x = 5;

const element = <h1>{x < 10 ? "Hello" : "Goodbye"}</h1>;

🧠 *Use ternary directly in JSX for quick inline conditions*