What is JSX?

JSX is a syntex extensin created by Facebook. It makes us easy to understand the code and makes the code easy to maintain.

2. Superpowers of JSX.

- Easy to maintain
- Secure
- Easy to debug

3. Role of type attribute in script tag? What options can I use there?

The `type` attribute in the script tag defines the type of script that we we want to run inside our app. `type` attribute can be of the following types:

- `text/javascript` : It is the basic standard of writing javascript code inside the `<script>` tag.

e.g

```
<script type="text/javascript">
    const a = "Hello";
    const b = "World!";
    console.log(a + " " + b); // Hello World!
</script>
```

- `text/ecmascript` : this value indicates that the script is following the `EcmaScript` standards.
- `module`: This value tells the browser that the script is a module that can import or export other files or modules inside it.
- `text/babel` : This value indicates that the script is a babel type and required bable to transpile it.
- `text/typescript`: As the name suggest the script is written in `TypeScript`.

4. {TitleComponent} vs {<TitleComponent/>} vs {<TitleComponent></TitleComponent>} in JSX.

- `{TitleComponent}`: This value describes the `TitleComponent` as a javascript expession or a value. The `{}` can embed a javascript expression or a values inside it.
- `<TitleComponent/>` : This value represents a Component that is basically returning Some JSX value. in simple terms `TitleComponent` a function that is returning a JSX value. A compoenet is written inside the `{< />}` expression.
- `<TitleComponent></TitleComponent>` : `<TitleComponent />` and `<TitleComponent></TitleComponent>` are equivalent only when `<TitleComponent />` has no children components.The opening and closing tags are created to include the child components.

e.g.

```
<TitleComponent>
    <ChildComponen1 />
    <ChildComponen2 />
    <ChildComponen3 />
</TitleComponent>
```

How JSX is executing?

JSX ⇒ uses ⇒ React.createElement ⇒ Object ⇒ HTML(DOM)

what is babel ?

babel converted our jsx to react.createElement and give it to the browser (for render)