```
Javascript !!!!!
      F1(num1,num2)
            //We want to use num1 and num2
            var p = num1 * num2 //Line x
            var p1 = num1 + num2 //Line y
     }
     //different ways of calling
     F1("hi", "hello") --- error on line x , concat will happen on liney
     F1("12","34") ---- extract by parseInt( JS attempts to complete operation) and multiply ,
      concat will happen on liney
```

Tag Opening	Tag Body	Tag Closing
<mytag age="{12}" name="pp"></mytag>	children	

F1(12,34) ---- multiply, addition

props.name , props.age	Accessing attributes of the tag	
props.children	Accessing body of the tag	

```
Ex1 --- Write a react component that takes some content in the Tag body
           Output ---- show the content along with number of chars in the tag body
     <CharCount> This is a wonderful morning </CharCount>
           Ш
           ||
```

Output Text: This is a wonderful morning chars: 27

WE also added a CSS file and the class on div using JSXAttribute className (camel case )

Event Handling in React!! Events are similar to Javascript event, JSX Event name is in CAMEL CASE

```
onclick -----> onClick
 onchange ----> onChange
<button onclick="validate()" /> -----> <button onClick={validate} />
```

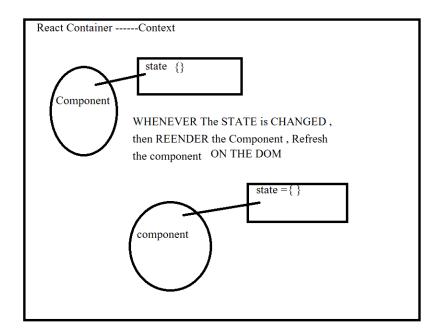
Ex2 --- show an alert when a button is clicked.

- 1. We never call a function in the onClick = { } , we always register a callback . It could be a function name or it could be arrow function .
- 2. Whenever the event occurs on the target ( html element on the screen ) , the **target info** is sent as **event** object to the callback method.
- 3. This event object can tell us about the target on which the event occurred using event.target.value !!!

Ex 3 ---- user enters a number in the input field , show the number in a <span> tag below .

## React context REFRESHES the DOM partially !!!

Only the changes STATE is refreshed !!! Changed local variables or changed properties are not refreshed on the DOM !!!!!



```
property1
setProperty(newval)
{
    property1 = newval
    CODE TO RERENDER THE COMPONENT IS EXECUTED
}
```

## In the class component

The **setState** method modifies the state object and re-renders the component

The property name MUST be state (accessed as this.state)
The setter method MUST be setState({ })

Create a STATE variable num with initial value 0!!
When we click a button INCR the value of num should be incremented and displayed in a span!!

```
Ex3 ---
   write a class component that accepts a name from the input field and shows the name in Upper
case after clicking on the button !!!
   1. in a span
   2. in the text field itself
     TF:_____button
     UPPERCASE
  class UpperEx extends React.Component
      state={inputdata:",uc:"}
      dosomething= ()=>{
     Let v = this.state.inputdata
      Let uk = v.toUpperCase()
     this.setState({uc:uk})
     }
      Render()
           Return (
           <div>
           <input type="text" onBlur={(e)=>{ this.setState({inputdata:e.target.value}) }} />
           <button onClick={this.dosomething}>OK</button>
           <span>{this.state.uc}/span>
           </div>
           )
     }
 }
function UpperExF()
 const [inputdata,setInputData] = useState(")
 const [uc,setUC] = useState(")
func()
     Var uk = Inputdata.to Upper Case()
      setUC(uk)
}
     Return(
      <div>
      <input type="text" onBlur={(e)=>{setInputData(e.target.value)}}}/>
```

```
<br/>
<br/>
<br/>
<br/>
<span>{uc}</span><br/>
</div>
)
```



