INNER SCRIPT:

Which will write inside the HTML file and specific to that HTML only.

EXTERNAL SCRIPT:

Which will write in external ".JS" file and used in any HTML file by declaring in

```
<script src="filename">
```

Variable:

Variables are used to store values

```
var name = "John";
```

In java script you can store the various kind of values in variables like integer, string, decimal.

```
As shown in below
```

```
var a = "Harsha";
var b = "Vardhan";
var c = a+b;
document.write(c);
var a = 1;
var b = 2;
var c = a+b;
document.write(c);
```

Two kind of variables available in java script.

Local Variables: A variable which will declare inside the function. These variables work inside the function only.

```
function my(){
var a = "Harsha";
var b = "Vardhan";
var c = a+b;
document.write(c);
}
```

Global Variables: A variable which will declare outside the function. These variables work inside the function only and outside the function.

```
var a = "Harsha";
var b = "Vardhan";
var c = a+b;
function my(){
  document.write(c);
}
function my1(){
  document.write(c);
}
```

Various ways to Print OutPut:

- Writing into an HTML element, using **innerHTML**.
- Writing into the HTML output using **document.write()**.
- Writing into an alert box, using window.alert().
- Writing into the browser console, using **console.log()**.

Even odd number:

```
HTML

<script src="training.js">

</script>

<body>

<input type="text" id="one"/>

<input type="button" value="CHECK" onClick="my()">

</body>

JS:

function my(){

var first=document.getElementById("one").value;

if((first%2) ==0){

document.getElementById("demo").innerHTML = "even";

}else{
```

```
document.getElementById("demo").innerHTML ="odd";
}
}
Events:
Onmouseover:
<body>
<input type="button" value="click" onmouseover="this.style.background='yellow'" />
</body>
OnMouseout:
<body>
<input type="button" value="click" onmouseout="this.style.background='blue'"/>
</body>
onClick:
<body>
<input type="button" value="click" onclick="this.style.background='blue'"/>
</body>
<body>
<input type="button" value="click" onclick="function "/>
</body>
Window:
<input type="button" value="START"</pre>
onclick="window.open('www.google.com','mywindow','height=200,width=300')" />
Dates:
<script>
var a = new Date();
document.write(a);
var a = new Date().getFullYear();
document.write(a);
var a = new Date().getMonth();
document.write(a);</script>
```

TimingEvents:

```
setInterval
<div id="time">
</div>
function getTime(){
        document.getElementById("time").innerHTML = new Date();
       }
setInterval(getTime,1000);
clearInterval:
<div id="time">
</div>
function getTime(){
        document.getElementById("time").innerHTML = new Date();
}
var times;
function start(){
times = setInterval(getTime,1000);
}
function stop(){
clearInterval(times);
}
```

Functions: If you have a few lines of code that needs to be used several times.

Creating a Function

- 1. Use the keyword **function** followed by the name of the function.
- 2. After the function name, open and close parentheses.
- 3. After parenthesis, open and close curly braces.
- 4. Within curly braces, write your lines of code.

ArgumentedFunctions:

```
<body>
NO1<input type="text" id="feildone"/></br>
No2<input type="text" id="feildtwo"/></br>
<input type="button" value="ADD" onclick="add(parseInt(feildone.value),parseInt(feildtwo.value))"
/>
<input type="button" value="SUB" onclick="sub(parseInt(feildone.value),parseInt(feildtwo.value))"
/>
<input type="button" value="MUL"
onclick="mul(parseInt(feildone.value),parseInt(feildtwo.value))"/>
</body>
function add(a,b){
       var c;
       c = a + b;
        document.write(c);
}
function sub(a,b){
       var c;
       c = a - b;
        document.write(c);
}
function mul(a,b){
       var c;
       c = a * b;
       document.write(c);
}
```

ConditionalStatements:IF-Else

```
function check(){
       var number = document.getElementById("feildone").value;
       if((number%2) ==0){
document.write("EVENNUMBER");
       }else{
               document.write("ODDNUMBER");
       }
}
For:
function table(){
       var number=document.getElementById("feildone").value;
       for(var i=0;i<10;i++){
               var result=number*i;
document.write(number+"*"+i+"="+result+"</br>");
       }
}
While:
function table(){
       var number=document.getElementById("feildone").value;
       var i=0;
       while(i<10){
       var result=number*i;
document.write(number+"*"+i+"="+result+"</br>");
               j++;
               }
}
```

RegularExpression:

```
function regDemo(){
       var details=document.getElementById("feildone").value;
       var result = details.match(/[a-zA-Z]@[a-zA-Z]+\.[a-z]/);
       if(result){
               document.write("valid");
       }else{
       document.write("not valid");
       }
}
/^[a-zA-Z]@[a-zA-Z]+\.com+$/
UserValidation:
<body>
<div id="errordiv" style="color:red;">
</div>
<form action="" onsubmit="return validate();">
First Name<input type="text" id="fname" onblur="return validate();"></br>
Last Name<input type="text" id="Iname" onblur="return validate();"></br>
Email<input type="text" id="email" onblur="return validate();"></br>
Password<input type="text" id="password" onblur="return validate();"></br>
ReEnterPassword<input type="text" id="repassword" onblur="return validate();"></br>
<input type="submit">
</form>
</body>
<script>
function validate(){
       var fname=document.getElementById("fname").value;
       var Iname=document.getElementById("Iname").value;
       var email=document.getElementById("email").value;
       var password=document.getElementById("password").value;
       var repassword=document.getElementById("repassword").value;
```

```
if(fname ==null||fname==""){
       document.getElementById('errordiv').innerHTML="Firstname require";
       return false;
}
if(Iname ==null||Iname==""){
       document.getElementById('errordiv').innerHTML="Lastname require";
       return false;
}
if(email ==null||email==""){
       document.getElementById('errordiv').innerHTML="Email require";
       return false;
}
if(email!=null||email==""){
var result = email.match(/[a-zA-Z]@[a-zA-Z]+\.[a-z]/);
if(result){
}else{
       document.getElementById('errordiv').innerHTML="Email not valid";
       return false;
}
}
if(password ==null | | password==""){
       document.getElementById('errordiv').innerHTML="Password require";
       return false;
}
if(repassword ==null||repassword==""){
       document.getElementById('errordiv').innerHTML="Repassword require";
       return false;
}
```