**JavaScript**

**Part-1**

* JavaScript is the programming language of HTML and the Web.
* JavaScript is one of the 3 languages all web developers must learn:

*1. HTML to define the content of web pages*

*2. CSS to specify the layout of web pages*

*3. JavaScript to program the behaviour of web pages*

**The <script> Tag**

In HTML, JavaScript code is inserted between <script> and </script> tags.

Eample

<html>

<body>

<h2>JavaScript in Body</h2>

<p id="demo"> </p>

<Script>

document.getElementById("demo").innerHTML = "My First JavaScript";

</script>

</body>

</html>

**JavaScript in <head> or <body>???**

Scripts can be placed in the <body>, or in the <head> section of an HTML page, or in both.

**JavaScript in <head>**

Example

<!DOCTYPE html>  
<html>

<head>  
<script>  
function myFunction() {  
  document.getElementById("demo").innerHTML = "Paragraph changed.";  
}  
</script>  
</head>  
<body>

<h1>A Web Page</h1>  
<p id="demo">A Paragraph</p>  
<button type="button" onclick="myFunction()">Try it</button>

</body>  
</html>

**JavaScript in <body>**

In this example, a JavaScript function is placed in the <body> section of an HTML page.

The function is invoked (called) when a button is clicked:

Example

<!DOCTYPE html>  
<html>  
<body>  
  
<h1>A Web Page</h1>  
<p id="demo">A Paragraph</p>  
<button type="button" onclick="myFunction ()">Try it</button>  
  
<script>  
function myFunction() {  
 document.getElementById("demo").innerHTML = "Paragraph changed.";  
}  
</script>  
  
</body>  
</html>

**JavaScript Output**

**JavaScript Display Possibilities**

JavaScript can "display" data in different ways:

* 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 print()

1. **Using innerHTML**

* To access an HTML element, JavaScript can use the document.getElementById(id) method
* The id attribute defines the HTML element. The innerHTML property defines the HTML content

Example

<!DOCTYPE html>  
<html>  
<body>  
  
<h1>My First Web Page</h1>  
<p>My First Paragraph</p>  
  
<p id="demo"></p>  
  
<script>  
document.getElementById("demo").innerHTML = 5 + 6;  
</script>  
  
</body>  
</html>

1. **Using document.write()**

Example

<!DOCTYPE html>  
<html>  
<body>  
  
<h1>My First Web Page</h1>  
<p>My first paragraph.</p>  
  
<script>  
document.write(5 + 6);  
</script>  
  
</body>  
</html>

1. **Using window.alert()**

You can use an alert box to display data:

Example

<!DOCTYPE html>  
<html>  
<body>  
  
<h1>My First Web Page</h1>  
<p>My first paragraph.</p>  
  
<script>  
window.alert(5 + 6); /\* OR alert(5+6);\*/  
</script>  
  
</body>  
</html>

1. **JavaScript Print**

* JavaScript does not have any print object or print methods.
* You cannot access output devices from JavaScript.
* The only exception is that you can call the window.print() method in the browser to print the content of the current window.

Example

<!DOCTYPE html>  
<html>  
<body>  
  
<button onclick="window.print()">Print this page</button>  
  
</body>  
</html>>