

MODULE-4

- Javascript → ECMA 262 Standard

Javascript

It was invented by Brendan Eich in 1995. Now it is known as ECMA 262. Javascript is inserted b/w the `<script>` tag

eg: `<!DOCTYPE HTML>`

`<html>`

`<body>`

`<h2> JavaScript </h2>`

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

`<script>`

`document.getElementById("demo").`

`innerHTML = "My first JavaScript";`

`</script>`

`</body>`

`</html>`

Output:-

JavaScript

My first JavaScript

"innerHTML" is used to access html element. Javascript can be written in either head or body of an html file

Javascript in HEAD

`<!DOCTYPE html>`

`<html>`

`<head>`

```
<script>
function myFunction()
{ document.getElementById("demo").innerHTML = "Sreehaari
  Rockzz";
}
</script>
</head>
<body>
<h1> A web page </h1>
<p id="demo"> Pious is very serious </p>
<button type="button" onclick="Myfunction()">Try it </button>
</body>
</html>
```

Output:-

A web page
Pious is very serious
<input type="button" value="Try it"/>

A web page
Sreehaari Rockzz
<input type="button" value="Try it"/>

JavaScript Variables

eg: var x=5;

var z=2;

JavaScript Identifiers

Names are case sensitive

JavaScript Operators

+ → addition

- → subtract

* → multiplication

** → exponentiation

/ → division

% → modulus

String Operators

var txt1 = "Meghna";

var txt2 = "Karthik";

var txt3 = txt1 + " " + txt2;

answer:- Meghna Karthik

① Q.A. JS to add 2 numbers 3 & 4.

ans. ~~<script>~~ <html>

<head>

<script>

~~function~~ addNumbers()

var x=3;

var y=4;

var sum = x+y;

```

        document.getElementById("demo").innerHTML = sum;
    </script>
</head>
<body>
    <p id="demo"></p>
</body>
</html>

```

091

```

<script>
    document.write(3+4);
</script>
• <script>
    var a = "Sreerashi is very busy";
    var b = "Pious is very serious";
    var c = "ble love Dinkan";
    document.getElementById("demo").innerHTML = a + "<br>" + b +
    "<br>" + c;

```

```

</script>

```

Output:- Sreerashi is very busy
Pious is very serious
ble love Dinkan

JavaScript Functions

```

<!DOCTYPE HTML>

```

```

<html>

```

```

<body>

```


<h2> Javascript Functions </h2>

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

<script>

```
function myFunction(p1,p2) {
    return p1 * p2;
}
```

```
document.getElementById("demo").innerHTML = myFunction(
    4,3);
```

</script>

</body>

</html>

① W.A JS function to convert fahrenheit to celsius

$$C = \frac{5}{9} * (F - 32)$$

ans <!DOCTYPE HTML>

<html>

<body>

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

<script>

```
function ftoC(f) {
    return (5/9) * (f-32);
}
```

```
document.getElementById("demo").innerHTML = ftoC(36);
```

</script>

</body>

</html>

JavaScript Arrays

```
var cars = ["BMW", "Benz", "Audi"];
```

`cars.length` $\Rightarrow 3 \Rightarrow$ No. of elements in array `cars`

`cars.join("*");` \Rightarrow ["BMW*Benz*Audi"];

`cars.slice(1);` \Rightarrow ["Benz", "Audi"];

`push` \rightarrow insert element into array \Rightarrow `cars.push("Maserati");`

`pop` \rightarrow delete " from "

`cars.sort()` \rightarrow Sort array in alphabetical order \Rightarrow ["Audi", "Benz", "BMW"]

`cars.reverse()` \rightarrow Print array in reverse order of elements
`sort()` & `reverse` together \Rightarrow Array sorted in decreasing order

JavaScript Objects

```
var car = { type: "Fiat", model: "500", color: "white" };
```

`car.type` \Rightarrow Fiat

JavaScript For Loop

```
<script>
```

```
var i;
```

```
for (i=0; i<5; i++)
```

```
{ document.write(i);
```

```
}
```

```
</script>
```

```
<html>
```

```
<script>
```

```
function Hello() {
```



```
document.write("Hello there");  
}  
</script>  
<body>  
  <input type="button" onclick="Hello()" value="CLICK ME">  
</body>  
</html>
```

19/2/20

HTML DOM (Document Object Model)

It is an API for javascript. When a webpage is loaded the browser creates a DOM of the page. It is constructed as tree of objects.

jQuery

It is a javascript library introduced in 2006. (John Resig). The motto of jQuery is "Write Less, Do More".

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<script src="https://googleapis.com..."></script>
```

```
<script>
```

```
$(document).ready(function()
```

```
{ $( "button" ).click(function()
```

```
{ $( "p" ).hide();
```

```
});
```

```
});
```

```
</script>
```

```
</head>
```

Before Click Me

This is a paragraph

This is another paragraph

Click Me

```
<body>
<p> This is a paragraph </p>
<p> This is another paragraph </p>
<button> Click Me </button>
</body>
</html>
```

After Click Me

Click Me

#id-name to hide specific element

```
<!DOCTYPE html>
<html>
<head>
<script src="https://googleapis.com..."></script>
<script>
$(document).ready(function()
{
$(button).click(function()
{
$("#test").hide();
});
});
</script>
</head>
```

Before Click Me

Sareehaai loves ice cream
Podiyaa aroozz

Click Me

```
<body>
<p> Sareehaai loves ice cream </p>
<p id="test"> Podiyaa aroozz </p>
<button> Click Me </button>
</body>
</html>
```

After Click Me

Sareehaai loves ice cream

Click Me