

Script tag

```
<script type="text/javascript">
    ...
</script>
```

Basic

```
// One line comment
/*
Mult-line comment
*/
function addNumbers(a, b){
    return a+b;
}
```

Button

```
<button onclick="functionName()">click me</button>
...
<script>
    function functionName(){
        // Write what will happen after button is clicked here
    }
</script>
```

variables

<code>var a;</code>	create new variable
<code>var a = 10;</code>	create a new variable and assign value
<code>var b = " something ";</code>	create a new variable and assign string
<code>var c = [1, 12, 31, 45]</code>	create a new array with 4 elements in it
<code>c[0]</code>	access item 0 (first item) in array c

output

<code>console.log(a)</code>	Output to browser developer console
<code>document.write(a)</code>	Directly write to end of HTML document
<code>alert(a)</code>	Display popup box with the message
<code>document.getElementById(" xxx ").innerHTML= a;</code>	Element ID "xxx" content replaced with the message

Input

<code>var a = prompt("question ", default);</code>	Popup box ask question, assign value to a
<code>var a = document.getElementById(" xxx ").value</code>	xxx is a textbox's id, and the value in textbox assigned to a



Loops

```
// For loop
for(var i=0; i<10; i++){
    doc ume nt.w ri te(i);
}

// For loop printing everything in array (arr)
// method 1
for (var i=0; i< arr.le ngth; i++){
    doc ume nt.w ri te( arr [i]);
}

// method 2
for (var i of arr){
    doc ume nt.w ri te(i);
}

// while loop
// also outputting everything in arr
var i=0;
while (i< arr.le ngth){
    doc ume nt.w ri te( arr [i]);
    i++;
}
```

conditions

```
// If
if (a>b){
    // a > b
}else if (a==b){
    // do when a equals to b
}else{
    // everything else
}
```

Logical

a==b	equals
a!=b	not equals
a>=b	a larger than or equals b
a <=b	a smaller than or equals b
&&	Logical and, e.g. (3>1) && (3<10), used in if
	Logical or, e.g. (3>1) (3<-1), used in if
!	Logical not, e.g. a!=b same as !(a==b)

