



## List of JavaScript Statements

### OUTPUT

```
# This is a comment  
/* This is a multi-line comment */
```

```
window.alert("Hello World")
```

- Displays "Hello World" in an alert box

```
console.log("Hello World")
```

- Writes "Hello World" into the browser console

### DOM METHODS

These methods affect the overall HTML page

```
document.getElementById("id")
```

- Returns the element where id = "id"

```
document.getElementsByClassName("class")
```

- Returns a list of elements where class="class"

```
document.createElement("button")
```

- Creates a button element

```
element.childNodes
```

- Returns all children elements within 'element'

```
element.parentNode
```

- Returns the predecessor of 'element'

```
element.appendChild
```

- Adds a DOM element to 'element'

```
element.removeChild(child_element)
```

- Removes 'child\_element' from 'element'

```
element.id
```

- Returns or assigns an id to an element

```
element.class
```

- Returns or assigns a class to an element

```
elementName.innerText = "Hello World"
```

- Assigns text to an HTML element

## EVENTS

Events occur only in certain circumstances; they're generally associated with functions.

```
document.onload
```

- Occurs when the web page is initially loaded

```
element.onclick
```

- Occurs when the element is clicked

```
element.onkeyup
```

- Occurs when any key is pressed in the element

## VARIABLES

Variables must be declared before they are used.

```
var number = 1;  
var workshop = "Advanced Web Dev";  
var even_numbers = [2, 4, 6, 8];
```

## ARITHMETIC OPERATORS

**+** Add      **-** Subtract      **\*** Multiply      **/** Divide      **++** Increase by 1      **--** Decrease by 1

## STRING FUNCTIONS

```
var string = "javascript";  
string.length
```

- Returns 10 – the length of the string

```
string.slice(0, 4)
```

- Slices string from index 0 to index 4. Returns "java"

```
string.replace('a', 'A')
```

- Replaces first instance of 'a'. Returns "jAvascript"

## CONDITIONAL STATEMENTS

### RELATIONAL OPERATORS

== Equal to    != Not equal to    > Greater than    < Less than    >= Greater than or equal to    <= Less than or equal to

### BOOLEAN OPERATORS - EVALUATE TO TRUE OR FALSE

&& and

|| or

! not

```
(1 > 0) && (4 > 0)
```

Evaluates to: True

```
(1 > 3) || (4 > 3)
```

Evaluates to: True

```
!(1 == 1)
```

Evaluates to: False

### ONE WAY SELECTION

```
if (name == "Sudo") {  
    alert("Hello Sudo");  
}
```

### TWO WAY SELECTION

```
if (mark >= 50) {  
    alert("Pass");  
} else {  
    alert("Fail");  
}
```

### MULTIPLE SELECTION

```
if (number > 0) {  
    alert("Positive");  
}
```

```
} else if (number < 0) {
```

```
    alert("Negative");  
} else {  
    alert("Zero");  
}
```

## LOOPS

### COUNTED LOOPS

```
for (i = 0; i < 5; i++) {  
    alert(i);  
}
```

- This outputs the values 1-9

```
// Loop through an array

var even_numbers = [2, 4, 6, 8];
for (i = 0; i < even_numbers.length; i++)
{
  alert(even_numbers[i]);
}
```

- This all values stored in the array

### CONDITIONAL LOOPS

```
var i = 1;
while (i < 10) {
  alert(i);
}
```

- This outputs the values 1-9

### FUNCTIONS

```
// Function that adds two numbers
function add(number1, number2) {
  return number1 + number2;
}
alert( add( 3, 4 ) )
```

- Displays 7

```
// Anonymous Functions Example
window.onload = function() {
  alert("Hello");
}
```

- This outputs "Hello" once the window is loaded, and cannot be used any other time.