

What is an operator ?

Operator is a symbol which operates two or more operands

1. arithmetic operators

+ - \* / %

2. assignment operators

== += -= \*= /= %=

3. inc/ dec operators

++ --

4. relational operators

< > <= >= ==

5. logical operators && || !=

6. concatenation operator +

1. arithmetic operators:

addition :

```
<!DOCTYPE html>
<html>
<head>
<title>Operators</title>
</head>
<body>
<script type="text/javascript">
  var a=10; var b=20 ;
  var c=a+b;
  document.write("addition value is ::" + c);
  document.write("<br>")
  var str1="hello"
  var str2="JS"
  var str3=str1+str2
  document.write(" str3 value is "+str3);
</script>
</body>
</html>
```

ass : subtraction (-)

multiplication(\*)

division (/)

modulo division (%)

var a;

a = 100; //assignment operator document.write(a); //100 document.write("<br>");

var b;

```
b = a; //assignment operator document.write(b); //100 document.write("<br>");
```

```
a += 10; // a=a+10
```

```
document.write(a); //110 document.write("<br>");
```

```
a -= 10; // a=a-10 document.write(a); //100 document.write("<br>");
```

```
a *= 10; // a=a*10 document.write(a); //1000 document.write("<br>");
```

```
a /= 10; //a=a/10 document.write(a); //100 document.write("<br>");
```

```
a %= 30; // a=a%30 document.write(a); //10
```

Increment/Decrement Operator :

```
var a = 10;
```

```
document.write(a); //10
```

```
document.write("<br>");
```

```
a++; //increment operator document.write(a); //11 document.write("<br>");
```

```
a--; //decrement operator document.write(a); //10
```

relational operators :

< , > , <= , >= , ==

```
var a=10
```

```
var b=20
```

```
if (a<=b) {
```

```
    alert("both are equal") // true
```

```
}
```

```
else
```

```
{  
  
    alert ("both are not equal") // false  
  
}
```

logical operators:

&& !!

AND :

T T = T

T F = F

F T = F

F F = F

OR :

T T T

T F T

F T T

F F F

concatenation operator +

Events :

event is an action on any specific element

user can able to interact with element with events

click

double click

mouseover

mouseout

mousemove

focus

blur

change

how to provide event on element ?

case :

html

```
<button id="btn"> Click Me </button>
```

js :

```
document.getElementById("btn").addEventListener("click",Myfun)
```

```
// user defined function
```

```
function myfun()
```

```
{
```

```
  alert( "button clicked");
```

```
}
```

1. document : html (body)
2. document.getElementById("btn") : getting id from html
3. addEventListener : this is a method for register an event .

4. click : event name

5. myFun : event handler (it is a user defined function)

### **Variables:**

Variable is a container or a storage area which can contain some data .

```
var a = 10; //integer type (or) numeric
```

```
var b = 67.7876; //floating-point
```

```
var c = "Hyderabad"; //string
```

```
var d = 'Javascript'; //string
```

```
var e = true; //boolean
```

```
var f = false; //boolean
```

```
var g; //undefined
```

```
var h = null; //null (empty)
```

```
var devices=["iPhone","iPad","iPod"]; // array
```

```
var empDetails={ "name":"srinivas", "qual":"MCA", "salary":80000}; //
```

Object

```
document.write(a); //10  
document.write("<br/>");
```

```
document.write(b); //67.7876  
document.write("<br/>");
```

```
document.write(c); //Hyderabad  
document.write("<br/>");
```

```
document.write(d); //Hyderabad  
document.write("<br/>");
```

```
document.write(e); //true  
document.write("<br/>");
```

```

document.write(f); //false
document.write("<br/>");

document.write(g); //undefined
document.write("<br/>");

document.write(h); //null

console.log(devices[0]);
console.log(devices[1]);
console.log(devices[2]);

for (i=0;i<devices.length; i++)
{
    document.write("<br/>")
    document.write(devices[i]);
}
// Coming From Object
console.log(details.name);
console.log(details.qual);
console.log(details.salary);

```

## What is an operator ?

Operator is a symbol which operates two or more operands

### // Arithmetic Operators

```

var a=10; var b=20;
var sum=a+b;
document.write("Addition value is ::" + sum);
document.write("</br>");

var sub=b-a;
document.write("Subtraction value is ::" + sub);
document.write("</br>");

var mul=a*b;
document.write("Multiplication value is ::" + mul);
document.write("</br>");

var div=b/a;
document.write("Division value is ::" + div);
document.write("</br>");

var mdiv=b%a;
document.write("ModuloDivision value is ::" + mdiv);

```

```
document.write("</br>");
```

### **Assignment Operator::**

```
var a;  
a = 100; //assignment operator  
document.write(a); //100  
document.write("<br>");
```

```
var b;  
b = a; //assignment operator  
document.write(b); //100  
document.write("<br>");
```

```
a += 10; // a=a+10  
document.write(a); //110  
document.write("<br>");
```

```
a -= 10; // a=a-10  
document.write(a); //100  
document.write("<br>");
```

```
a *= 10; // a=a*10  
document.write(a); //1000  
document.write("<br>");
```

```
a /= 10; //a=a/10  
document.write(a); //100  
document.write("<br>");
```

```
a %= 30; // a=a%30  
document.write(a); //10
```

### **Increment/Decrement Operator :**

```
var a = 10;  
document.write(a); //10  
document.write("<br>");
```

```
a++; //increment operator  
document.write(a); //11  
document.write("<br>");
```

```
a--; //decrement operator  
document.write(a); //10
```

### **Relational Operator ::**

```
var x = 100;
```

```
var y = 200;

var temp1, temp2, temp3, temp4, temp5, temp6;

temp1 = (x == y);
document.write(temp1); //false
document.write("<br>");

temp2 = (x != y);
document.write(temp2); //true
document.write("<br>");

temp3 = (x < y);
document.write(temp3); //true
document.write("<br>");

temp4 = (x <= y);
document.write(temp4); //true
document.write("<br>");

temp5 = (x > y);
document.write(temp5); //false
document.write("<br>");

temp6 = (x >= y);
document.write(temp6); //false
```

### **logical operators**

```
var x = 100;
var y = 200;
var z = 50;

var temp1 = ( (x<y) && (x>z) ); // logical and
document.write(temp1); //true
document.write("<br>");

var temp2 = ( (x<y) || (x<z) ); //logical or
document.write(temp2); //true
document.write("<br>");

var temp3 = ( !(x<y) );
document.write(temp3); //false
```

### **Concatenation Operator : +**

```
var s4=10;
var s5=20;
var s6=s4+s5;
document.write(s6); //30
```



```
document.write("</br>");
    var s1 = "srinivas";
    var s2 = "tech";
    var s3;
    s3 = s1 + "-" + s2; //string + string + string
    document.write(s3); //sri_tech
document.write("</br>");
    var p1 = "srinivas";
    var p2 = 123;
    var p3;
    p3 = p1 + p2; // srinivas123
    document.write(p3);
```