

Operators

Javascript Operators are used to assign, add, subtract, compare data. JavaScript is having **arithmetic**, **logical**, **assignment** and **comparison** operators.

JavaScript has both **binary** and **unary** operator including one **ternary** operator (conditional operator).

binary operator

Binary operators required two operands, one before and one after operator. $x+y=z$

```
x (operand) +(operator) y(operand)
```

Unary Operator

Unary operators required only one operand, either before or after operator. $i++$

```
x++
```

```
++x
```

Ternary Operator

Ternary Operator is conditional operator in JavaScript which use three operands. For Example, $(3>2) ? \text{console.log("yes")}: \text{console.log("no")}$ will print yes and $(1>2) ? \text{console.log("yes")}: \text{console.log("no")}$ will print no.

yes

```
(3>2) ? console.log("yes"): console.log("no");
```

no

```
(1>2) ? console.log("yes"): console.log("no");
```

Type of Operators in Javascript

Arithmetic Operators

Logical Operaors

Assignment Operators

Comparision Operators

Arithmetic Operators

An **Arithmetic operator** is used to perform **Arithmetic operations** between values. Like Addition, Subtraction, Multiplication, Division etc

Arithmetic operators in JavaScript

Operator	Description	Example
+	Addition	2+3=5
-	Subtraction	5-3=2
*	Multiply	2*3=6
/	Divide	6/3=2
%	Reminder	6%3=0
++	Increment, y++ means y = y+1	var y=2; ++y; y=3
--	Decrement, y-- means y = y-1	var y=2; --y; y=1
**	Exponentiation Operator	2**3 returns 8

The ** Exponentiation Operator was introduced in JS ES7. There is no support for Exponentiation Operator in IE browser, chrome<52 and Firefox<52

Logical Operators

Logical Operators are used to check logic between two operators. **and (&&)**, **or (||)** and **not (!)** are logical operators.

Logical Operators in JavaScript

Operator	Description	Example
&&	and, when both are correct	2 < 5 && 2 > 1 is true
	or, when any one is correct	var x=2, 2>5 x==2 is true
!	not	!(2==3) is true

Assignment Operators

Assignment operators are used to assign some value to js variables. =, +=, -=, *=, /= are all **assignment operators in javascript**.

Assignment Operators in JavaScript

Operator	Description	Example
=	Assignment	x=2; means x is 2
+=	Addition Assignment	var x=2; x+=2 means x=x+2
-=	Subtraction Assignment	var x=2; x-=2 means x=x-2
=	Multiplication Assignment	var x=2; x=2 means x=x*2
/=	Division Assignment	var x=2; x/=2 means x=x/2

Comparision Operators

Comparison operators are used in a statement to compare two values.

Comparison Operators in JavaScript

Operator	Description	Example
==	Equal to	2=="2" is true
===	Strict equal to	2==="2" is false
!=	not equal	2!=1 is true
!==	not strict equal	2!== "2" is true
>	greater than	2 > 5 is false, & 2 < 5 is true
>=	greater than or equal to	3 >= 3 is true
<	less than	1 < 3 is true
<=	less than or equal to	2 <= 2 is true