Javascript Operators

In JavaScript, an operator is **a special symbol used to perform operations on operands (values and variables)**. For example, 2 + 3; // 5. Here + is an operator that performs addition, and 2 and 3 are operands.

Types of JavaScript Operators

There are different types of JavaScript operators:

- Arithmetic Operators
- Assignment Operators
- Comparison Operators
- Logical Operators
- Conditional Operators

1) Arithmetics Operators

In JavaScript, arithmetic operators take numerical values (either literals or variables) as their operands and return a single numerical value. There are four standard arithmetic operators, addition (+), subtraction (-), multiplication (*), and division (/).

Arithmetic Operators

Operators	Meaning	Example	Result
+	Addition	4+2	6
-	Subtraction	4-2	2
*	Multiplication	4*2	8
/	Division	4/2	2
%	Modulus operator to get remainder in integer division	5%2	1
+ +	Increment	A = 10; A+ +	11
— —	Decrement	A = 10; A— —	9

2) Assignment operator

The Assignment operator is **equal (=)** which assigns the value of right-hand operand to its left-hand operand. That is if a = b assigns the value of b to a.

Operator	Example	Equivalent Expression (m=15)	Result
=	y = a+b	y = 10 + 20	30
+=	m +=10	m = m+10	25
-=	m -=10	m = m-10	5
*=	m *=10	m = m*10	150
/=	m /=10	m = m/10	1.5
%=	m %=10	m = m%10	5
**=	m**=2	m = m**2 or $m = m^2$	225
//=	m//=10	m = m//10	1

3) Comparison operators

The **Comparison operators** are mainly used to perform the logical operations that determine the equality or difference between the values.

Relational Operators

Operators	Meaning	Example	Result
<	Less than	5<2	False
>	Greater than	5>2	True
<=	Less than or equal to	5<=2	False
>=	Greater than or equal to	5>=2	True
==	Equal to	5==2	False
! =	Not equal to	5! =2	True
===	Equal value and same type	5 === 5	True
		5 === "5"	False
! ==	Not Equal value or Not same type	5 ! == 5	False
		5 ! == "5"	True

4) Logical Operators

Logical Operators

Operator	Meaning	Example	Result
&&	Logical and	(5<2)&&(5>3)	False
||	Logical or	(5<2)||(5>3)	True
!	Logical not	!(5<2)	True

Conditional (Ternary) Operator

JavaScript also contains a conditional operator that assigns a value to a variable based on some condition.

Example:

```
let voteable = (age < 18) ? "Too young":"Old enough";
```