

Comparison Operators

Comparison operators are used to compare two values. They return a Boolean value (`true` or `false`) based on the comparison result.

Global Operators - Present in all example languages

Definition	Operator
Equal To	<code>==</code>
Not Equal To	<code>!=</code>
More Than	<code>></code>
Less Than	<code><</code>
More Than or Equal To	<code>>=</code>
Less Than or Equal To	<code><=</code>

TypeScript Differences

Definition	Operator	Description
Loose Equality Operator	<code>==</code>	In TypeScript, this will perform a simple equality comparison where type casting will automatically happen. For example, <code>3 == "3"</code> will return <code>true</code>
Strict Equality Operator	<code>===</code>	In TypeScript, this will perform a strict equality comparison. It does not perform automatic type casting. For example, <code>3 === "3"</code> will return <code>false</code> .
Loose Inequality Operator	<code>!=</code>	This performs the inverse of the Loose Equality Operator, so <code>3 != "3"</code> will return <code>false</code> .
Strict Inequality Operator	<code>!==</code>	This performs the inverse of the Strict Equality Operator. For example, <code>3 !== "3"</code> will return <code>true</code>

Arithmetic Operators

Arithmetic operators are used to perform mathematical operations on numeric operands.

Operator	Definition
----------	------------

+	Addition
-	Subtraction
*	Multiplication
/	Division
%	Modulo (Remainder)
**	Exponentiation (Power)

Logical Operators

Logical operators are used to perform logical operations on Boolean values. They return a Boolean result based on the evaluation of the operands.

TypeScript, C#

Operator	Definition
&&	Logical AND
	Logical OR
!	Logical NOT

Python

Operator	Definition
and	Logical AND
or	Logical OR
not	Logical NOT

Assignment Operators

Assignment operators are used to assign values to variables. They combine an arithmetic operation with assignment.

Operator	Definition
=	Assign
+=	Add and Assign

-=	Subtract and Assign
*=	Multiply and Assign
/=	Divide and Assign
%=	Modulo and Assign

Bitwise Operator

Bitwise operators are used to perform operations on individual bits of binary numbers. They work at bit-level and manipulate bits of operands

Operator	Definition
&	Bitwise AND
	Bitwise OR
^	Bitwise XOR
~	Bitwise NOT
<<	Left Shift
>>	Right Shift