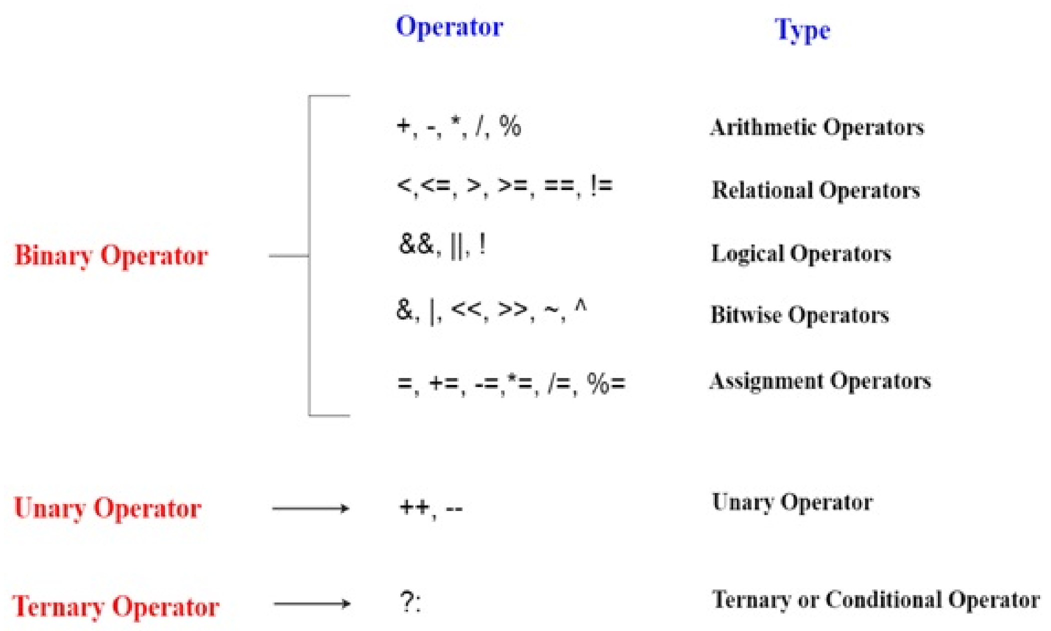
C# operators

javatpoint.com/csharp-operators

An operator is simply a symbol that is used to perform operations. There can be many types of operations like arithmetic, logical, bitwise etc.

There are following types of operators to perform different types of operations in C# language.

- Arithmetic Operators
- Relational Operators
- Logical Operators
- Bitwise Operators
- Assignment Operators
- Unary Operators
- Ternary Operators
- Misc Operators



	Operator	Type
Binary Operator	+, -, *, /, %	Arithmetic Operators
	<,<=, >, >=, ==, !=	Relational Operators
	&&, ||, !	Logical Operators
	&, |, <<, >>, ~, ^	Bitwise Operators
	=, +=, -=,*=, /=, %=	Assignment Operators
Unary Operator	++, --	Unary Operator
Ternary Operator	?:	Ternary or Conditional Operator

Precedence of Operators in C#

The precedence of operator specifies that which operator will be evaluated first and next. The associativity specifies the operators direction to be evaluated, it may be left to right or right to left.

Let's understand the precedence by the example given below:

1. int data= 10+ 5*5

The "data" variable will contain 35 because * (multiplicative operator) is evaluated before + (additive operator).

The precedence and associativity of C# operators is given below:

Category (By Precedence)	Operator(s)	Associativity
Unary	+ - ! ~ ++ -- (type)* & sizeof	Right to Left
Additive	+ -	Left to Right
Multiplicative	% / *	Left to Right
Relational	< > <= >=	Left to Right
Shift	<< >>	Left to Right
Equality	== !=	Right to Left
Logical AND	&	Left to Right
Logical OR	|	Left to Right
Logical XOR	^	Left to Right
Conditional OR	||	Left to Right
Conditional AND	&&	Left to Right
Null Coalescing	??	Left to Right
Ternary	?:	Right to Left
Assignment	= *= /= %= += - = <<= >>= &= ^= |= =>	Right to Left