

# 012 - C 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.
- Shift Operators.
- Logical Operators.
- Bitwise Operators.
- Ternary or Conditional Operators.
- Assignment Operators.
- Misc Operators.

## PRECEDENCE OF OPERATORS IN C :-

The precedence of operator species that which operator will be evaluated first and next.

The associativity specifies the operator direction to be evaluated; it may be left to right or right to left.

The precedence and associativity of C operators is given below:

Category	Operator	Associativity
Postfix	() [] -> . ++ --	Left to right
Unary	+ - ! ~ ++ -- (type)* & sizeof	Right to left
Multiplicative	* / %	Left to right
Additive	+ -	Left to right
Shift	<< >>	Left to right
Relational	< <= > >=	Left to right
Equality	== !=	Left to right
Bitwise AND	&	Left to right
Bitwise XOR	^	Left to right
Bitwise OR		Left to right
Logical AND	&&	Left to right
Logical OR		Left to right
Conditional	?:	Right to left
Assignment	= += -= *= /= %=>>= <<= &= ^=  =	Right to left
Comma	,	Left to right