

operators

OPERATOR	TYPE	ASSOCIATIVITY
() [] . ->		left-to-right
++ -- + - ! ~ (type) * & sizeof	Unary Operator	right-to-left
* / %	Arithmetic Operator	left-to-right
+ -	Arithmetic Operator	left-to-right
<< >>	Shift Operator	left-to-right
< <= > >=	Relational Operator	left-to-right
== !=	Relational Operator	left-to-right
&	Bitwise AND Operator	left-to-right
^	Bitwise EX-OR Operator	left-to-right
	Bitwise OR Operator	left-to-right
&&	Logical AND Operator	left-to-right
	Logical OR Operator	left-to-right
? :	Ternary Conditional Operator	right-to-left
= += -= *= /= %= &= ^= = <=> >>=	Assignment Operator	right-to-left
,	Comma	left-to-right

Operator precedence

Type	Operator	Action
Arithmetic	-	Subtraction
	+	Addition
	*	Multiplication
	/	Division
	%	Modulus
	--	Decrement (by 1)
	++	Increment (by 1)
	+=	Increment (a+=b means a=a+b)
Relational	-=	Decrement (a-=b means a=a-b)
	>	Greater than
	>=	Greater than or equal to
	<	Less than
	<=	Less than or equal to
	==	Equal to
Logic	!=	Different from
	&&	AND
		OR
Bit-wise	!	NOT
	&	AND
		OR
	^	XOR
	~	NOT
	>>	Right shift
Miscellaneous	<<	Left shift
	?	Ternary (y=x>9?100:200)
	& and *	Pointer operators
	sizeof	Width of a datatype (in bytes)
	. and ->	Access to structures
	[]	Access to arrays

Precedence	Operator
Most	() [] -> .
↑	! ~ ++ -- - (cast) * &
	sizeof
	/ %
	<< >>
	< <= > >=
	== !=
	&
	&&
	?
	= += -= *= /=
	,
Least	