

C23 Operator Precedence

Order	Operator	Description	Associativity
1	++	Postfix increment	<i>Left-to-right</i>
	--	Postfix decrement	
	()	Function call	
	[]	Array Subscripting	
	.	Element selection by reference	
	->	Element selection through pointer	
	(type){list}	Compound literal (C99)	
2	++	Prefix increment	<i>Right-to-left</i>
	--	Postfix decrement	
	+	Unary plus	
	-	Unary minus	
	!	Logical NOT	
	~	Bitwise NOT (ones' complement)	
	(type)	Type cast	
	*	Indirection (dereference)	
	&	Address-of	
	sizeof	Size-of	
	alignof	Alignment requirement (C23)	
3	*	Multiplication	<i>Left-to-right</i>
	/	Division	
	%	Modulo (remainder)	
4	+	Addition	<i>Left-to-right</i>
	-	Subtraction	
5	<<	Bitwise left shift	<i>Left-to-right</i>
	>>	Bitwise right shift	
6	<	Less than	<i>Left-to-right</i>
	<=	Less than or equal to	
	>	Greater than	
	>=	Greater than or equal to	
7	==	Equal to	<i>Left-to-right</i>
	!=	Not equal to	
8	&	Bitwise AND	<i>Left-to-right</i>
9	^	Bitwise XOR	<i>Left-to-right</i>
10		Bitwise OR	<i>Left-to-right</i>
11	&&	Logical AND	<i>Left-to-right</i>
12		Logical OR	<i>Left-to-right</i>
13	?:	Ternary conditional	<i>Right-to-left</i>
14	=	Direct assignment	<i>Right-to-left</i>
	+=	Assignment by sum	
	-=	Assignment by difference	
	*=	Assignment by product	
	/=	Assignment by quotient	
	%=	Assignment by remainder	
	<<=	Assignment by bitwise left shift	
	>>=	Assignment by bitwise right shift	
	&=	Assignment by bitwise AND	
	^=	Assignment by bitwise XOR	
	=	Assignment by bitwise OR	
15	,	Comma	<i>Left-to-right</i>