

Reserved words

C89 has 32 reserved words, also known as keywords, which are the words that cannot be used for any purposes other than those for which they are predefined:

<code>auto</code>	<code>double</code>	<code>int</code>	<code>struct</code>
<code>break</code>	<code>else</code>	<code>long</code>	<code>switch</code>
<code>case</code>	<code>enum</code>	<code>register</code>	<code>typedef</code>
<code>char</code>	<code>extern</code>	<code>return</code>	<code>union</code>
<code>const</code>	<code>float</code>	<code>short</code>	<code>unsigned</code>
<code>continue</code>	<code>for</code>	<code>signed</code>	<code>void</code>
<code>default</code>	<code>goto</code>	<code>sizeof</code>	<code>volatile</code>
<code>do</code>	<code>if</code>	<code>static</code>	<code>while</code>

C99 reserved five more words:

<code>_Bool</code>	<code>_Imaginary</code>	<code>restrict</code>
<code>_Complex</code>	<code>inline</code>	

C11 reserved seven more words:^[22]

<code>_Alignas</code>	<code>_Atomic</code>	<code>_Noreturn</code>	<code>_Thread_local</code>
<code>_Alignof</code>	<code>_Generic</code>	<code>_Static_assert</code>	

Keyword	Variable Type	Range
char	Character (or string)	-128 to 127
int	Integer	-32,768 to 32,767
short short int	Short integer	-32,768 to 32,767
long	Long integer	-2,147,483,648 to 2,147,483,647
unsigned char	Unsigned character	0 to 255
unsigned int	Unsigned integer	0 to 65,535
unsigned short	Unsigned short integer	0 to 65,535
unsigned long	Unsigned long integer	0 to 4,294,967,295
float	Single-precision floating point (accurate to 7 digits)	$\pm 3.4 \times 10^{-38}$ to $\pm 3.4 \times 10^{38}$
double	Double-precision floating point (accurate to 15 digits)	$\pm 1.7 \times 10^{-308}$ to $\pm 1.7 \times 10^{308}$

Precedence	Operator	Description	Associativity
1	::	Scope resolution	Left-to-right
2	++ -- () [] . ->	Suffix/postfix increment and decrement Function call Array subscripting Element selection by reference Element selection through pointer	
3	++ -- + - ! ~ (<i>type</i>) * & sizeof new, new[] delete, delete[]	Prefix increment and decrement Unary plus and minus Logical NOT and bitwise NOT Type cast Indirection (dereference) Address-of Size-of Dynamic memory allocation Dynamic memory deallocation	Right-to-left
4	. ^x -> ^x	Pointer to member	Left-to-right
5	* / %	Multiplication, division, and remainder	
6	+ -	Addition and subtraction	
7	<< >>	Bitwise left shift and right shift	
8	< <= > >=	For relational operators < and ≤ respectively For relational operators > and ≥ respectively	
9	== !=	For relational = and ≠ respectively	
10	&	Bitwise AND	
11	^	Bitwise XOR (exclusive or)	
12		Bitwise OR (inclusive or)	
13	&&	Logical AND	
14		Logical OR	
15	?: = += -= *= /= %= <<= >>= &= ^= =	Ternary conditional Direct assignment (provided by default for C++ classes) Assignment by sum and difference Assignment by product, quotient, and remainder Assignment by bitwise left shift and right shift Assignment by bitwise AND, XOR, and OR	Right-to-left
16	throw	Throw operator (for exceptions)	Left-to-right
17	,	Comma	