

C keywords

This is a list of reserved keywords in C. Since they are used by the language, these keywords are not available for re-definition.

auto	float	signed	_Alignas (since C11)
break	for	sizeof	_Alignof (since C11)
case	goto	static	_Atomic (since C11)
char	if	struct	_Bool (since C99)
const	inline (since C99)	switch	_Complex (since C99)
continue	int	typedef	_Decimal128 (since C23)
default	long	union	_Decimal32 (since C23)
do	register	unsigned	_Decimal64 (since C23)
double	restrict (since C99)	void	_Generic (since C11)
else	return	volatile	_Imaginary (since C99)
enum	short	while	_Noreturn (since C11)
extern			_Static_assert (since C11)
			_Thread_local (since C11)

The most common keywords that begin with an underscore are generally used through their convenience macros:

keyword	used as	defined in
_Alignas (since C11)	alignas	stdalign.h
_Alignof (since C11)	alignof	stdalign.h
_Atomic (since C11)	atomic_bool, atomic_int, ...	stdatomic.h
_Bool (since C99)	bool	stdbool.h
_Complex (since C99)	complex	complex.h
_Decimal128 (since C23)	(no macro)	
_Decimal32 (since C23)	(no macro)	
_Decimal64 (since C23)	(no macro)	
_Generic (since C11)	(no macro)	
_Imaginary (since C99)	imaginary	complex.h
_Noreturn (since C11)	noreturn	stdnoreturn.h
_Static_assert (since C11)	static_assert	assert.h
_Thread_local (since C11)	thread_local	threads.h

Also, each name that begins with a double underscore __ or an underscore followed by an uppercase letter is reserved: see identifier for details.

Note that digraphs <%, %>, <:, :>, %:, and %:%: provide an alternative way to represent standard tokens.

The following tokens are recognized by the preprocessor when they are used *within* the context of a preprocessor directive:

if	ifdef	include	
elif	ifndef	line	defined
else	define	error	__has_c_attribute (since C23)
endif	undef	pragma	

The following tokens are recognized by the preprocessor when they are used *outside* the context of a preprocessor directive:

_Pragma (since C99)

The following additional keywords are classified as extensions and conditionally-supported:

asm
fortran

References

- C17 standard (ISO/IEC 9899:2018):
 - 6.4.1 Keywords (p: 42–43)
 - J.5.9 The fortran keyword (p: 422)
 - J.5.10 The asm keyword (p: 422)
- C11 standard (ISO/IEC 9899:2011):
 - 6.4.1 Keywords (p: 58–59)
 - J.5.9 The fortran keyword (p: 580)
 - J.5.10 The asm keyword (p: 580)
- C99 standard (ISO/IEC 9899:1999):
 - 6.4.1 Keywords (p: 50)
 - J.5.9 The fortran keyword (p: 514)
 - J.5.10 The asm keyword (p: 514)
- C89/C90 standard (ISO/IEC 9899:1990):
 - 3.1.1 Keywords
 - G.5.9 The fortran keyword
 - G.5.10 The asm keyword

See also

C++ documentation for C++ keywords

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