C# Keywords

abstract

A class modifier that specifies a class cannot be instantiated and the full implementation will be provided by a subclass.

A method modifier that specifies a method is implicitly virtual and without an implementation.

add

An event accessor for customizing the subscription to an event.

alias

Suffixes an extern directive.

as

A binary operator that performs a reference conversion, evaluating to null (rather than throwing an exception) if the conversion fails.

ascending

A query syntax operator used in conjunction with orderby.

base

Accesses a base-class implementation of a member.

Calls the base class's constructor from a subclass's constructor.

bool

A logical data type that can be true or false.

break

A jump statement that exits a loop or switch statement block.

by

A query syntax operator used in conjunction with group.

byte

A 1-byte, unsigned integral data type.

case

A selection statement that defines a particular choice in a switch statement.

catch

A keyword for the clause in a try statement to catch exceptions of a specific type.

char

A 2-byte, Unicode character data type.

checked

A statement or operator that enforces arithmetic bounds checking on an expression or statement block.

class

A type declaration keyword for a custom reference type; typically used as a blueprint for creating objects.

A generic type parameter constraint, indicating the generic type must be a reference type.

const

A modifier for a local variable or field declaration whose value is statically evaluated and immutable.

continue

A jump statement that forgoes the remaining statements in a loop and continues to the next iteration.

decimal

A 16-byte floating point data type that can precisely represent real numbers with a base-10 fractional component.

default

A special label in a switch statement specifying the action to take when no case statements match the switch expression.

An operator that returns the default value for a type, typically used in conjunction with generic type parameters.

delegate

A type declaration keyword for a type that defines a protocol for a method.

A keyword to indicate an anonymous method.

descending

A query syntax operator used in conjunction with orderby.

do

A loop statement whose statement block repeats until the while expression at the end of the loop evaluates to false.

double

An 8-byte, floating-point data type.

dynamic

A dynamically typed variable.

else

A conditional statement that defines the action to take when a preceding if expression evaluates to false.

enum

A type declaration keyword that defines a value type representing a group of named numeric constants.

equals

A query syntax operator that performs an equi-join, used in conjunction with join.

event

Defines an event member within a type. The event keyword is followed by a delegate type; code outside the containing type can only perform += and -= operations on the event.

explicit

An operator that defines a custom explicit conversion.

extern

A method modifier that indicates that the method is implemented with unmanaged code.

A directive that declares a reference to an external namespace, which must correspond to an argument passed to the C# compiler.

false

A literal of the bool type.

finally

The keyword in the clause of a try statement that executes whenever control leaves the scope of the try block.

fixed

A statement to pin down a reference type object so the garbage collector won't move it during pointer arithmetic operations.

A field modifier within an unsafe struct to declare a fixed length array.

float

A 4-byte floating-point data type.

for

A loop statement that combines an initialization statement, continuation condition, and iterative statement into one statement.

foreach

A loop statement that iterates over collections that implement IEnumerable or IEnumerable<T>.

from

A query syntax operator that specifies the sequence from which to query.

get

Identifies the accessor that returns the value of a property.

global

A keyword placed in front of an identifier to indicate the identifier is qualified with the global namespace.

goto

A jump statement that jumps to a label within the same method and same scope as the jump point.

group

A query syntax operator that splits a sequence into groups given a key value to group by.

if

A conditional statement that executes its statement block if its expression evaluates to true.

implicit

An operator that defines a custom implicit conversion.

in

The operator between a type and enumerated sequence in a foreach statement.

A query syntax operator used in conjunction with from.

A type parameter modifier indicating contravariance.

int

A 4-byte signed integral data type.

interface

A type declaration keyword for a custom reference type that defines a contract for a type comprising a set of implicitly abstract members.

internal

An access modifier that indicates that a type or type member is accessible only to other types in the same assembly.

into

A query syntax operator that signals either continuation or group-join.

is

A relational operator that evaluates to true if the left operand's type matches, is derived from, implements, or can be unboxed to, the type specified by the right operand.

join

A query syntax operator that performs an equi-join. This is used in local queries to perform efficient keyed lookup-based joins.

let

A query syntax operator that introduces a new variable into each element in a sequence.

lock

A statement that acquires an exclusive lock on a reference-type object to synchronize multiple threads.

long

An 8-byte signed integral data type.

namespace

A keyword for defining a name that encloses a set of types in a hierarchical name.

new

An operator that calls a constructor on a type, allocating a new object on the heap (for reference types) or initializing it (for value types).

A type member modifier that hides an inherited member with a new member with the same signature.

A generic type parameter constraint, indicating that the type must have a parameterless constructor.

nu11

A reference-type literal meaning no object is referenced.

object

A predefined type that is the ultimate base class for all types.

on

A query syntax operator used in conjunction with join or group.

operator

A modifier used to declare custom operator overloads.

orderby

A query syntax operator to sort a sequence.

out

A parameter and argument modifier that specifies that the variable is passed by reference and must be assigned by the method being called.

A type parameter modifier indicating covariance.

override

A method modifier that indicates that a method overrides a virtual method in a base class.

params

A parameter modifier that specifies that the last parameter of a method may accept multiple parameters of the same type.

partial

A class or method modifier that indicates the definition of the class or method is split (typically across files).

private

An access modifier that indicates that only the containing type can access the member.

protected

An access modifier that indicates that only the containing type or derived types can access the member.

public

An access modifier that indicates that a type or type member is accessible to all other types.

readonly

A field modifier specifying that a field can be assigned only in its declaration or its containing type's constructor.

ref

A parameter and argument modifier that specifies that the variable is passed by reference and is assigned before being passed to the method.

remove

An event accessor for customizing the unsubscription to an event.

return

A jump statement that that exits a method, specifying a return value when the method is not void.

sbyte

A 1-byte, signed integral data type.

sealed

A class modifier that indicates a class cannot be subclassed, or that an overridden member cannot be overridden again in subclasses.

select

A query syntax operator used to project (transform) each element in the sequence.

set

Identifies the accessor that sets a property's value.

short

A 2-byte signed integral data type.

sizeof

An operator for use in unsafe code blocks that returns the size in bytes of a struct.

stackalloc

An operator that allocates memory on the stack.

static

A type member modifier that indicates that the member applies to the type rather than to an instance of the type.

A class modifier indicating the class is comprised of only static members and cannot be instantiated.

string

A predefined reference type that represents an immutable sequence of Unicode characters.

struct

A type declaration keyword for a custom value type. Structs are used instead of classes where value-type semantics are desired.

A generic type parameter constraint, indicating the generic type must be a value type.

switch

A selection statement that allows a selection of choices to be made based on the value of a predefined type.

this

A variable that references the current instance of a class or struct.

A keyword that allows one constructor to call another.

A parameter modifier for the first parameter in a static method, making the method an extension method.

throw

Throws an exception when an abnormal condition has occurred.

true

A literal of the bool type.

try

A statement that defines a statement block where errors can be caught and handled (via a catch block), and/or cleanup code can run via a finally block.

typeof

An operator that returns the type of an object as a System. Type object.

uint

A 4-byte unsigned integral data type.

ulong

An 8-byte unsigned integral data type.

unchecked

A statement or operator that prevents arithmetic bounds checking on an expression.

unsafe

A type modifier, member modifier, or statement that permits executing code that is not verifiable by the CLR (notably, that uses pointers).

ushort

A 2-byte unsigned integral data type.

using

A directive that specifies that types in a particular namespace can be referred to without requiring their fully qualified type names.

A statement that ensures an object implementing IDisposable is disposed of at the end of the statement's scope.

value

A special identifier that denotes the implicit variable assigned in the **set** accessor of a property.

var

An implicitly typed local variable declaration.

virtual

A class method modifier that indicates that a method can be overridden by a derived class.

void

A keyword used in place of a type for methods that don't have a return value.

volatile

A field modifier instructing the compiler and CLR to enforce load-acquire and store-release semantics when reading or writing the field in multithreaded scenarios.

where

A query syntax operator used to filter each element in a sequence with a bool expression.

while

A loop statement to iterate a statement block while an expression at the start of each iteration evaluates to true.

yield

A statement that yields the next element from an iterator block.