# C# Programming Reference Sheet

Built In Data Types & Literals

Integers

byte sbyte int uint long ulong short ushort

Floating Point Numbers

decimal double float

Strings and Characters

char string

Boolean

bool

Working with Strings

Assignment (giving a string a value)

Concatenation (joining strings)

Comparison

Construction from other types:

Programs and Modules

Creating a program

Using a class from a library

Custom Types

Classes

Enumerations

Structs

Arrays

Declaration

Access

Loop with index i

For each loop

Other Things

Reading from Terminal

Writing to Terminal

Comments

Declaring Methods

Declare a method with parameters:

public void SayHello(string name)

Declare a method that returns data:

public int Multiply(int a, int b)

Pass by reference:

public void Square(ref int a); void Square(out int a). ref is two-way, out is out-only.

Simple Programming Statements

Constant declaration

public const double PI = 3.141;

Variable declaration

public int radius;

Assignment

Radius = PI / 5;

Method call

console.WriteLine(“Hello!”);

Sequence of statements - grouped

{ }

Structured Programming Statements

If statement

Case statement

While loop

Repeat loop

For loop

Boolean Operators and Other Statements

Comparison: equal, less, larger, not equal, less eq

Boolean: And, Or and Not

Skip an iteration of a loop

End a loop early

End a method: