# C# Programming Reference Sheet

Built In Data Types & Literals

Integers

Int, long, uint, ulong

Floating Point Numbers

Float, double

Strings and Characters

String, char

Boolean

Boolean

Working with Strings

Assignment (giving a string a value)

Word = “Hello Teacher”;

Concatenation (joining strings)

String join = “Hello” + ”Teacher”;

Comparison

Abc == bcdl;

Construction from other types:

Xyz = xyz.TOString();

Programs and Modules

Creating a program

Class Main{

Public static void Manclass()

}

Using a class from a library

Using [classname]

Ex: Using SwinGameSDK;

Custom Types

Classes

Public class example{

}

Enumerations

Enum card\_type{heart, spade,diamond, club};

Structs

Struct Student{ public string firstname; public string surname;}

Declaring Methods

Declare a method with parameters:

Public double sum\_two\_num(double n1, double n2){}

Declare a method that returns data:

Public double sum\_two\_num(double n1, double n2){ return n1 + n2}

Pass by reference:

Example = 10000;

Reference(ref example)

Console.WriteLine(Example);

Simple Programming Statements

Constant declaration

Private const int months = 12;

Variable declaration

Double half = 0.5;

Assignment

Win = 100;

Method call

Sequence of statements – grouped

{}

Structured Programming Statements

If statement

If(condition) then{} else {}

Case statement

Switch(variable){case1: statement; break; default: statement; break;

While loop

While(condition) do{…}

Repeat loop

Do( m +1,m++;} while(m < 1)

For loop

For(statement1, statement2, statement3 ){statement4;}

Boolean Operators and Other Statements

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

=, <, >, !=, <=, >=

Boolean: And, Or and Not

&&, !!, !

Skip an iteration of a loop

Continue;

End a loop early

Break;

End a method:

Return;

Arrays

Declaration

double[] price;

Access

Price[0]= 2.5;

Loop with index i

For(int i=n, i<x, i++){statement;}

For each loop

Forach(string items in price)

{

Statement;

}

Other Things

Reading from Terminal

Console.Readlin();

Writing to Terminal

Consolde.Write();

Console.WriteLine();

Comments

// Single line comment

/\* \*/ paragraph comment