# C# Programming Reference Sheet

Built In Data Types & Literals

Integers

Integer, short, long

(5, -2,5000)

Floating Point Numbers

Single, Double, Extended

(2.5,3.4,3.5)

Strings and Characters

String, char

(“World”, “W”)

Boolean

Boolean (true, False)

Working with Strings

Assignment (giving a string a value)

StringName := ‘Dimi’

Concatenation (joining strings)

Name : = StringName + ‘Moros’

Comparison

If (name == ‘Dimi’

Construction from other types:

Int myInt =42

String Mystring = myInt.ToString();

Declaring Methods

Declare a method with parameters:

Public void Method(type argument)

{Console.WrightLine(argument);}

Declare a method that returns data:

Int Method(){return sum;}

Pass by reference:

void DoubleValue(ref int number)

{number \*= 2;}

int num = 5;

DoubleValue(ref num);

Console.WriteLine(num);

Structured Programming Statements

If statement

if True { Console.WriteLine(“True”)

else (Console.WriteLine(“False”)

Case statement

Switch(day){

Case1:…; break; default:……; break;}

While loop

While True {}

Repeat loop

do{} While True {}

For loop

for (int k =0; k < 5; k++) { Console.WriteLine(k);}

Programs and Modules

Creating a program

Class progam{

Static void Main(string[] args){………} }

Using a class from a library

Message myMessage

myMessage = new Message(args);

Custom Types

Classes

Class Person{ public name(args){} …}

Enumerations

Public enum Grade{Pass,Credit}

Grade myGrade = Grade.Pass

Console.WrightLine(myGrade)

Structs

public struct Type

{

public int X { get; set; }

}

Arrays

Declaration

Int[] numbers = new int[5];

Access

Int number = number[0];

Loop with index i

For (int i = 0; i < numbers.length; i++){}

For each loop

Foreach(int number in numbers){……}

Other Things

Reading from Terminal

String name = Console.ReadLine();

Writing to Terminal

Console.WriteLine(“Hello”);

Comments

//comments bluh bluh

Simple Programming Statements

Constant declaration

Cosnt int MaxValue =100;

Variable declaration

Int age;

Assignment

age = 21;

Method call

Console.WrtieLine(“Hello, World!”);

Sequence of statements - grouped

{}

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;