

C# Programming Reference Sheet

Built In Data Types & Literals

Integers
Byte sbyte int unit long long short ushort
Floating Point Numbers
Decimal double float
Strings and Character
Char string
Boolean
Bool

Working with Strings

Assignment (giving a string a value)
String strA ="Hello ."
Concatenation (joining strings)
String strB = strA +"World !"
Comparison
strA == strB ,or string.Compare(strA , strB)
Construction from other types:
otherType.ToString()

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
If (a== b) { }
Case statement
Switch (caseSwitch) {case 1:black }
While loop
While (n < 6) { }
Repeat loop
Do { } ,while (n<5)
For loop
For (int i = 0; i. 5; i++)

Declaring Methods

Declare a method with parameters:
public void Say hello (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.

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

Custom Types

Classes
Public class Message (string message)
Enumerations
Enum Day {sat , sun ,mon , tues)
Structs
Public struct Point2d {
Int_x ,_y
Public Point2d (int x, int y) {...

Arrays

Declaration
String [] Message = new String [5]
Access
Message [0]
Loop with index i
For (int i =0 ; int <5 ; i ++) {
.... Message [i] ...
For each loop
For each (string str in message) (...

Programs and Modules

Creating a program
Namespace program
Class mainclass { }
Using a class from a library
#include SwinGameApi ;

Other Things

Reading from Terminal
Console.ReadLine ();
Writing to Terminal
Console.WriteLine ("Hello ,World !")
Comments
// /**/