**C# Programming Reference Sheet**



Declaring Methods

**Declare a method with parameters:**

<access><returntype><methodname>(params){}

Public int AddNumbers (int num1, int num2){}

**Declare a method that returns data:**

Public int AddNumbers (int num1, int num2){}

{Return num1 + num2;}

**Pass by reference:**

Keyword: ref

Int num =1;

Method (ref num);

Console.WriteLine(num);

Working with Strings

**Assignment: (giving a string a value)**

String name = “conrad”;

**Concatenation (joining strings)**

String example = “John” + “smith”;

**Comparison : ==**

If number == number2;

**Construction from other types:**int num = 5;

String msg = num.ToString();

Structured Programming Statements

**If statement:**

if (num1 < num2)..{} else

**Case statement: switch**

Switch(x)case 1 :…;break; case 2 :…;break default:…;break

**While loop:**

while (condition){ //code}

**Repeat loop:** runs at least once then repeats - do, while:do { //code} while (condition)

**For loop:**

for (int I =0; I < count; i++) { …}

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;

Built In Data Types & Literals

**Integers:**

Short, Int, long (-5000, 50, 99999999999)

**Floating Point Numbers:**

Float, Double (5.5, 1.21)

**Strings and Characters:**

String, Char (“ABCD”, “A”, “hello”)

**Boolean:**

Bool (true, false , yes , no)

Simple Programming Statements

**Constant declaration:**

public const string greeting = “hello”;

**Variable declaration**

string name;

**Assignment**

X = 1;

**Method call**

Draw();

**Sequence of statements - grouped:** between curly brackets{ … }