C# Programming Reference Sheet

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| Built In Data Types & Literals  Integers:  Int – (2,7)  Floating Point Numbers: Float, Double – (8.9, 56.991)  Strings and Characters: string, char – (‘y’ , “you”)  Boolean: bool – (0,1) |
|  |
| Simple Programming Statements  Constant declaration  private const double avogadro = 6.02 X 10^23  Variable declaration string name;  Assignment Year = 2032  Method call= age.ToMonths();  Sequence of statements = grouped: {} |
| Declaring Methods Declare a method with parameters: public void Print(string s) {….}  Declare a method that returns data: public int sum(int[] Nums){ }  Pass by reference: int Avg ( ref int refSum) {..} |

Strings

Assignment (giving a string a value) name = “Ekrar”

Concatenation (joining strings):

Name = “Mike” + “Kenny”

Comparison  
if(name == “ekrar”) {//do stuff}

Conversion from other types: x=2  
string y = “I want to eat” + x.ToString() + “ apples”

# Structured Programming Statements

If statement = if(i>20) {condition}

Case statement=

Switch (expression){case y : break;} While loop= while (condition){block}

Repeat loop= do {//statement} while (condition) For loop = for (int i = 6 ; i<=n; i++) {statement}

# 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 [data type] ;

# Arrays

Custom Types

Classes = class Shapedrawer(//code)

Enumerations = enum months {Jan, Feb, Mar}; Structs= structs Car{

Public string make; Public string model; Public int year; }

Declaration = String[] grade; Access = Grade[1];

Loop with index I =

for (int i=0; i< cars.Length(); i++) {}

For each loop

Foreach (string car in cars) {//statement}

Other Things Reading from Terminal = Console.Read() / Console.ReadLine()

Programs and Modules

Creating a program Namespace myProgram{

Class MyProgram{

Static void Main()(….)

}

}

Using a class from a library= using Shapedrawer;

Namespace myprogram{

}

Writing to Terminal = Console.Write() / Console.WriteLine()

Comments

//Single Line comments

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Multi line comments \*/

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