Some things apply to Java too

using System; - reference to System.dll – dynamic link library

namespace – outer cover of the content

class –

class Program – main class

main() – the main function that starts the program

static void Main(string[] args)

Console.WriteLine(“<content>”); - like printf

* Console.WriteLine($”<text>{variable}”); - Shorcut cw+tab+tab
* Console.WriteLine(“<text>”+<variable>)

<variable> = Console.Readline();

Console.Readkey(); - keep console open

create variable

string <name>;

value type full numeric –

* byte b=12 from 0 to 255 sb=12 from -128 to 127
* int i = 12 4 bytes
* uint ui=12 only positive numbers
* long l=12 8 bytes
* ulong ul = 12

float numbers

* double db= 12.4
* float fl = 35.4f - needs f at the end

decimal – mainly for money

* decimal d =435.4m – needs m at the end

char – 2 bytes

* char ch = ‘a’

boolean

* bool bl=true/false

examples: arrays, strings,

* string s = ‘hello’

<variable>.GetType() – Get variable type

Convert variable type numbers

from smaller to bigger

int x=4;

float y;

y=4;

from bigger to smaller

int b;

byte a = (byte)b;

Floats lose their fractions if converted to int.

String to int

int <name> = Convert.ToInt32(<string variable>);

Make Arrays

int[] <name> = new int[<number of places>]

int[] <name> = new int[<number>] {2,3,8};

int <name> = new int[]{2,4,6};

<name>.arraylenth – length of array

Make Matrix. Each row in the matrix can have a different amount of columns.

int[][] <name> = new int[<rows>][] {<values>}

<name> [<row>] = new int[<columns>] {<values>}

or

int[][] <name> = new int[][] {new int[] {values}, <next row>, <next row>}

foreach (<type> <variable> in <name>) – special for that uses each item in array. Variable grows according to the array.

foreach (int[] <variable> in <matrix>) – for matrices

{

foreach (int <other variable> in <variable>)

{

Console.WriteLine(<other variable>);

}

}