C# Crib sheet

Variables

int = integer (whole number)
float = decimal fraction (e.g. 3.0)
char = single character
String = array of characters
boolean = true/false
byte = v. small int
short = small int
long = large int
double = large float

Declaring a variable
String name;
public static final pi = 3.142; // constant
Initialising a variable
name = "Simon";
age = 27;

Comments

// Single line comment

/**
* Multi line comment
*
*/

Selection (If statements)

if (age < 4)
{
school = "Not yet";
}
else if (age < 11) {
school = "Primary";
}
else if (age == 11) { // Note **double equals**
school = "Primary or Secondary";
}
else if (age <= 16) {
school = "Secondary";
}
else {
school = "Out of range";
}

Iteration (Loops)

While
(A loop with an If statement at the top)
loopCounter = 0
while (loopCounter < 11)
{
// Do some stuff
loopCounter = loopCounter + 1;
}

Do ... While
(Good if you want the loop to run once, e.g. if asking for a user input)
do
{
choice = Console.ReadLine();
}
while (choice > 4);

For
(Good if you can work out how many times to repeat the loop)
for (int i = 1; i < 11; i++)
{
// Do some stuff
}

Random Numbers & Other Libraries

Random random = new Random();
x = random.next(10) // *Random number 0 – 9*

Strings
Concatenating Strings
String a = "Hello, ";
String b = "World!";
String c = a + b;   // *c now reads "Hello, World!"*