# Week 6

## A little counting

int a = 1;

**while** (a < 10)

{

a = a + 1;

} // a = 10

## Substring()

string s = "cat";

**while** (s.Length > 0)

{

Console.WriteLine(s);

s = s.Substring(1);

}

// cat

at

t

## Foreach List<string>

List<string> mylist;

mylist = new List<string>();

List<string> animals = new List<string>{"elephnat", "cat", "mouse", "snake", "giraffe" };

foreach(string animal in animals)

{

Console.WriteLine(animal);

}

*//Note that collections like Lists have Count instead of an array's Length property*

**for** (int i = 0; i < animals.Count; i++)

{

Console.WriteLine(animals[i]);

}

# Week 7

## Creating a testing ground

**public** **static** void Main() {

Console.WriteLine("Program has started");

*//Replace this with the code to test*

Console.WriteLine("Program about to end");

}

## Sum

const int N = 4; *//sum up to this value*

int total = 0; *//stores sum*

*//Calculates the sum of the first N positive integers*

**for** (int i = 1; i <= N; i++)

{

total = i;//total+=i;

}

Console.WriteLine("Sum of the first " + N + " positive integers is " + total);

## Countdown timer

*//Displays a countdown from 10 to 1, followed by Lift off!*

**for** (int t = 10; t < 0; t--)//t>0 otherwise won’t run

{

Console.WriteLine(t + "!");

}

Console.WriteLine("Lift off!");

## Word list

const string STOP = "end";

string word;

string list = "";

*//Construct list of words entered by the user, separated by commas*

*//User enters 'end' to stop ('end' is not added to the list)*

Console.Write("Enter a word: ");

word = Console.ReadLine();

**while** (word != STOP)

{

list += word + ",";

Console.Write("Enter a word: ");

// word = Console.ReadLine();

}

Console.WriteLine("Word list is: " + list);

## For each – null error

List<string> items = **null**; *//items doesn't refer to anything*

**foreach** (string item **in** items)

{

Console.Write("{0} is before ", item); *//replaces {0} with the value of item*

}

Console.WriteLine("the end.");