

# CSCI 1301 – Lab 15

March 4, 2019

## 1 Flavors of while loops

- Write a **while** loop asking the user for an integer, and looping as long as that integer is strictly greater than 0.
- Transform your **while** loop so that the program displays the sum of all the numbers entered when exiting the **while** loop.

An example of execution could be:

```
Enter a positive number to sum, or a negative number to exit
12
Enter a positive number to sum, or a negative number to exit
3
Enter a positive number to sum, or a negative number to exit
-2
Your total is 15.
```

Identify what type of loop it is: is it user-controlled, counter-controlled, or sentinel-controlled? Does it use a counter, a sentinel value, or an accumulator?

## 2 TryParse Method

### 2.1 Getting Familiar With It

Consider the code we just studied:

```
Console.WriteLine("Please, enter an integer.");
string message = Console.ReadLine();
int a;
bool res = int.TryParse(message, out a);
if (res)
{
    Console.WriteLine($"The value entered was an integer: {a}.");
}
else
{
    Console.WriteLine("The value entered was not an integer, so 0 is assigned to
↪ a.");
}
Console.WriteLine(a);
```

What happen if:

- The user enters an integer?
- The user enters a floating-point value?
- The user enters nothing?
- The user enters a string that contains alphabetical characters?

## 2.2 Using It

1. Write a code that ask the user to enter an integer, and ask the user again as long as the user entered something that isn't an integer.
2. Actually, there is a `TryParse` method in other classes as well: there is for instance a `Double.TryParse` and a `Decimal.TryParse` method. Write a small program that uses one of them.