

## Quiz 02 — Selection, Recursion

### C# Programming

This is a timed test. You have thirty minutes to complete the test. When you finish the test, email me your `Program.cs` file as a text document, and let me know that you have finished. I will ask you to run your program so that I can see that it compiles and runs.

Write a console application that *uses recursion* to compute the sum of the first  $n$  integers.  $n$  is a user entered value. See the code sample below that shows how this is done. I have included the sample output below.

#### Sample code

```
class Program
{
    static void Main(string[] args)
    {
        Console.Write("Please enter the number of integers to add: ");
        string strNumber = Console.ReadLine();
        int end = Int32.Parse(strNumber);
        int start = 0;
        int sum = 0;
        sum = GetSums(start, end, sum);
        Console.WriteLine($"the sum is { sum}");
    }

    private static int GetSums(int start, int end, int sum)
    {
        //your code here
    }
}
```

#### Sample output

```
Please enter the number of integers to add: 10
The sum of 0 and 0 is 0
The sum of 1 and 0 is 1
The sum of 2 and 1 is 3
The sum of 3 and 3 is 6
The sum of 4 and 6 is 10
The sum of 5 and 10 is 15
The sum of 6 and 15 is 21
The sum of 7 and 21 is 28
The sum of 8 and 28 is 36
The sum of 9 and 36 is 45
The sum of 10 and 45 is 55
the sum is 55
Press any key to continue . . .
```