

**CIS 345 – Business Information Systems Development II – Fall 2014**

In-class Exercise 1: Logic-building using Loops

Due on Blackboard: TODAY, Wednesday, September 3 by 10:00 PM

*Objective:* To create the logic to implement various patterns. *Make sure you are able to reproduce the exact pattern down to the last space and new line character.*

Implement the following as a Visual C# Console application. Name your project *Inclass1* and your class *Loops.cs*. Put your name, class, and class time in as a comment.

Within the *Main* method of your application, write the logic for the following parts. Precede each part with a comment line identifying which part is being displayed, e.g., “CIS 345 Inclass 1, Part 1.”

***When putting in “non-traditional” values for counters, put in a comment to explain WHY.***

1) Create the triangles in Exercise 6.15 from *Visual C# 2012: How to Program*. Do only parts (a) and (c).

2) Create the following patterns.

a) The diagonal within a square matrix. Make 10 levels

```
*
 *
  *
   *
    *
```

b) The reverse diagonal within a square matrix. Make 10 levels.

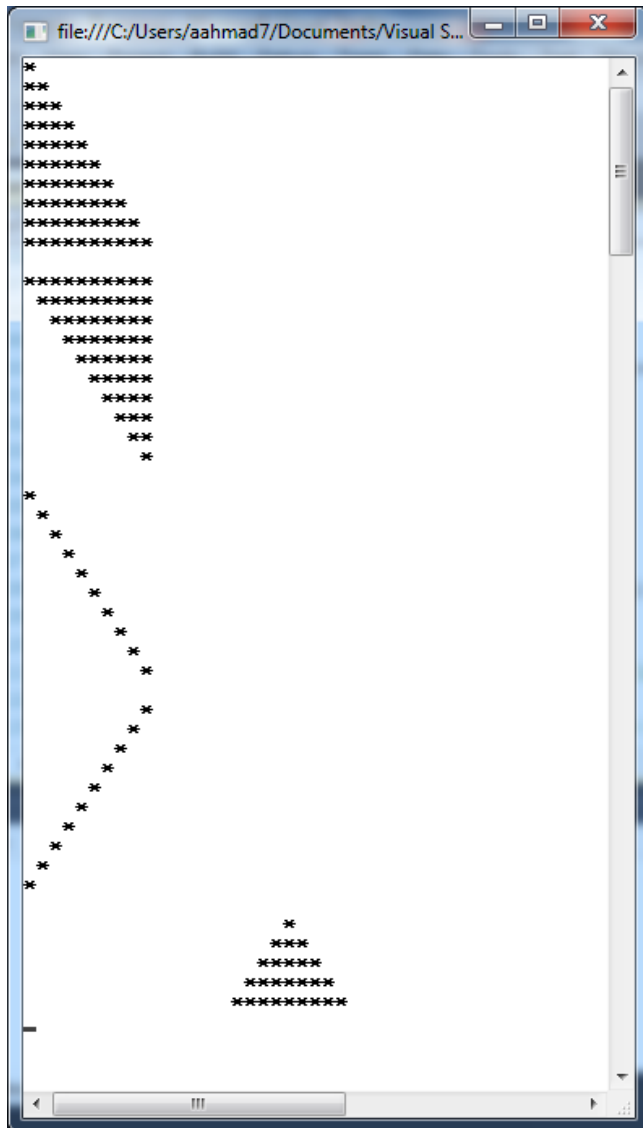
```

 *
 *
 *
 *
 *
```

3) Create an equilateral triangle of 5 levels. Place your triangle towards the center of the screen by inserting extra spaces.

Optionally, ask the user how many levels she would like.

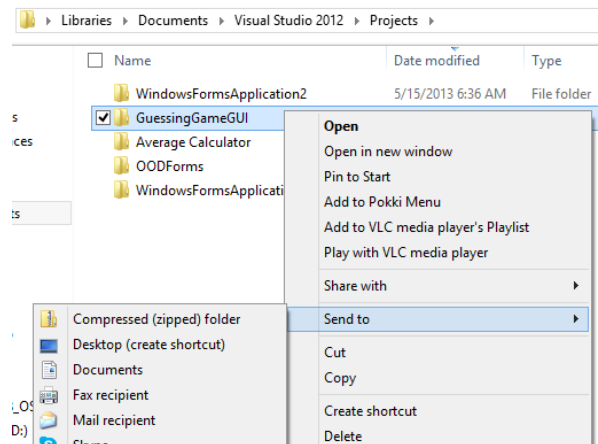
### *Sample Output*



## Submission Instructions

Submission should be made using a zip file that contains all of the Visual Studio C# project files. You will need to **zip the entire project folder** along with the .sln and .suo files. The folder will automatically contain the class source files as well as the executable file that is generated in \InClass1\bin\Debug folder. Upload file to the Blackboard assignment drop box.

Zip the entire top-level folder by right-clicking the folder and selecting Send to | Compressed (zipped) folder.



Using built-in windows zip tools: <http://windows.microsoft.com/en-us/windows/compress-uncompress-files-zip-files>

Make sure you check the following. Your grade is dependent on all these criteria being met.

- You have included your name as a comment within your class.
  - e.g. “// Inclass 1, Jane C. Smith, CIS 345, Tuesday 9:00 AM”
- Class file is called Loops.cs (rename from Program.cs).
- Your Visual Studio project is called Inclass1.
- Zip filename is: Inclass1.zip

Verify your zip file before you submit

- Check for actual class files being present in the folder before you zip it.
- Check your zip file size after zipping – if it is 1K, it likely contains only a shortcut.
- Uncompress your zip file before submitting and verify that files are present.
- Download your zip file after submitting, uncompress, and again verify that your files are present.