**CIS 2275 C++ Programming Part II NAME:**

# Program 8 The PatternMaker 50 pts

**Turn in requirements:**

1. Name your project LastnamePatternmakerP8, such as NelsonPatternmakerP8.
2. **5 pts** Submit to Blackboard, remove the intermediate files/folders and then upload your zipped project.

**Program Requirements:**

1. **5 pts** Write your name, email address and file name at the top of your source code in a comment.
2. **5 pts** Use cout statements to write your name, program title, and program objective to the screen so that it is the first thing I see when your program runs. This is your course header.
3. **5 pts** Use good C++ programming style and formatting for your program. Use appropriate comments to explain what you are doing.

**Program Requirements:**

You will need some text files with the initial patterns to start the P8 Game of Life program. You will build a program to create a text file containing the initial pattern. It will be called Lastname Patternmaker and will create text files with one pattern at a time for the grid of 45 rows and 78 columns.

It will begin by filling the 2\_D grid with ‘.’, which means that the cell is dead.

Then code an initial pattern of live cells by placing ‘\*’ in those cells.

Open an output stream and either hard code or ask the user for a filename. Name the file something descriptive, like “bar.txt” or “cross.txt.”

The first line of the file will be the number of rows and the number of columns in the grid, with a space in between (45 78).

Then write out the grid into the file.

This file will provide the initial pattern for your Game of Life.

You will create at least 5 of these text files containing different initial patterns and paste them into the source code of your P8 Game of Life program.