CS 1428 Honors
Lab 6

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Conway's Game of Life

Conway's Game of Life is an attempt to model real life through a simplified representation. As such, it can be described as a "life" simulator. In this simulator, there exist two states; alive and dead. Each person is represented by a cell. Any given cell, at any given time, is either dead or alive. When started, the simulator proceeds through iterations, or generations. Each time the game iterates, cells change states or stay the same based on a few simple rules. The simulation is what's known as a *zero player game*, which means that once you start the simulation, it proceeds without any further input from the user. More information is available on Wikipedia if needed.

Our implementation

We will be implementing a basic version of the Game of Life. We will use a two-dimensional array as our "world", with each element representing a cell in the game. Our two states will be represented as blank(dead), and an asterisk(alive). When the program iterates the world, each cell will change state based on the number of living neighbors it has. The rules that determine what happens are as follows:

Living Neighbors	**Currently Alive**	**Currently Dead**
Fewer than 2	Dies	Stays Dead
2	Stays Alive	Stays Dead
3	Stays Alive	Becomes Alive
Greater than 3	Dies	Stays Dead

The requirements for your program are as follows:

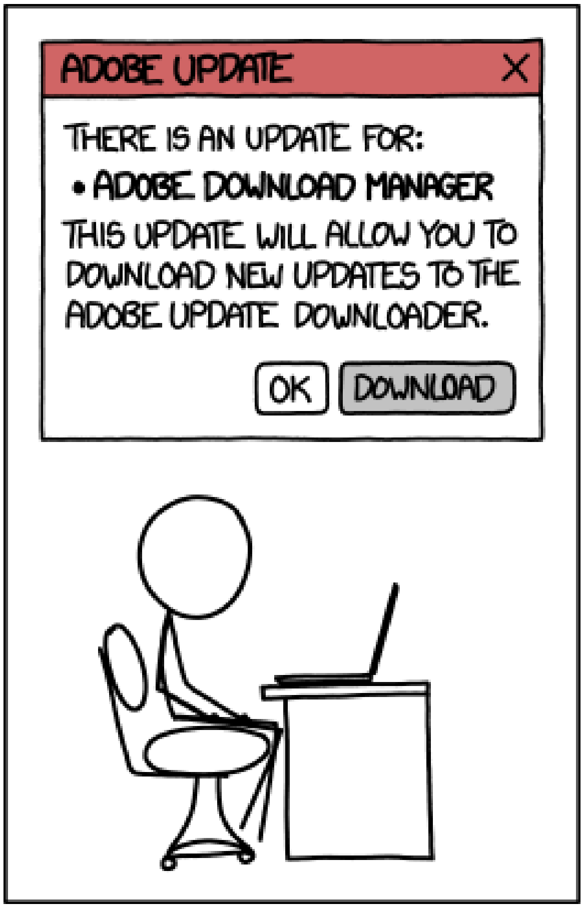
- Must process at least 10 iterations, or generations
- Must display each generation in turn, along with a label indicating the generation number

Hint: Keep in mind that you will need to write the next generation to a *seperate* two-dimensional array in order to avoid corrupting the current game board, and then copy the new generation to the array that is displayed.

I have also provided some starter code to assist you (starter.cpp).

Deliverables

Hard copy of the source code you wrote (lab6h.cpp). Soft copy (upload to homework upload) of your source code.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