

# INTRODUCTION TO COMPUTER SCIENCE I

## PROJECT 3 Conway's *Game of Life*

### 1 Your assignment

Implement Conway's Game of Life. To get started, login to `remus/romulus` and do the following:

1. Make a `project-3` directory and change into it.
2. Copy a few files from my public directory, like so:  

```
$ cp ~sfkaplan/public/COSC-111/project-3/* .
```
3. Copy your `Life.java` file and the `Support.java` file from Lab-7 into your directory, something like this:  

```
$ cp ../lab-7/Life.java .  
$ cp ../lab-7/Support.java .
```

From my public directory, you will have copied two pairs of files:

- `simple.init` and `simple.results`: A file that describes a small, initial configuration for a Game of Life, and then a file that shows the desired output from playing out that initial configuration.
- `X-pattern.init` and `X-pattern.results`: A slightly larger and more complex initial configuration, along with the output that the configuration yields over a few generations.

In your `Life.java` file, you must enhance your program to:

1. Evolves the grid, setting each cell as being *alive* or *dead* based on its state and the states of its neighbors.
2. Prints each evolved grid (but *not* the live-neighbors grid).
3. Repeats the evolution-and-printing cycle until the grid reaches *stasis*—the cells do not change from one step to the next.

### 2 How to submit your work

Use the usual CS submission system to submit your `Life.java` code.

**Project-3 is due on May 6, at 11:59 pm**  
*There can be no extensions to this deadline!*