

School Nova Computer Science 202
Homework 7 (due 11/14/2020)

Save your code as lastname_homework7.py and submit on Google Classroom

Task 1

Using networkx create an 8 by 8 grid that is a lattice (periodic = False).

Task 2

Create a list of (x, y) tuples for all possible grid locations (similar to 'locs' in the classwork).

Task 3

Create a simple class warrior that has three attributes (all passed by the user): (1) numerical id (integer), (2) "dark" or "light" side (string), and (3) location on the grid (an (x, y) tuple).

Task 4

Create 5 dark side and 5 light side warriors and place randomly on the grid. Make sure that each location can only be occupied by a single warrior (once again, use random.choice()).

Task 5

Plot your grid (consult class work code for help). Your final grid should look something like the below (of course, your locations will be different since they are random). The color represents the side (in my case, "dark" is "orange" and "light" is "skyblue") and the label is the numerical id of the warrior.

