Problem Set 6

(Out Thu 03/21/2024, Due Thu 03/28/2024)

Submissions are to be done by emailing to the course instructor: all requested Matlab files, plus a single file (PDF preferred), called yourfamilyname_pset6.pdf .

Problem 6

Use the Matlab file temple_abm_cellular_game_of_life_file_ic.m from the course website

 $\verb+http://math.temple.edu/~seibold/teaching/2024_2121/ \ to \ produce \ three \ interesting \ programs, \ named \ yourfamilyname_problem6a.m \ , \ yourfamilyname_problem6b.m \ , \ and \ \ yourfamilyname_problem6c.m \ , \ to \ be \ submitted.$

Each of the three files should run a different type of animation of Conway's Game of Life, with at least two interesting objects interacting with each other in interesting ways, in the spirit of the provided example of a glider gun shooting at a blinker ship.

Take the structures from an online resource like the website http://www.radicaleye.com/lifepage/glossary.html (or other resources). Make sure to submit the corresponding *.txt files of the objects with your codes.

Moreover, your file yourfamilyname_pset6.pdf should provide a brief discussion of each of your three examples: why did you compose it the way you did (can be an artistic reason), and what interesting observations does the simulation reveal?