**Schelling’s Segregation Model - Write-Up and Presentation**

Now that you have coded a simulation of Schelling’s Segregation Model, you should describe some of your findings. Specifically:

* How does the similarity threshold affect the **degree of segregation**?
* How does the population breakdown affect the **degree of segregation**?
* How do these two factors interact?

Next, you will take the model one (or two, or more) steps further. Some examples of questions you could ask as you explore the power of this model are:

* What happens when there are more than two populations?
* Can you change the move/stay rule to require a specific degree of diversity instead of similarity (i.e. include a diversity threshold). How does this affect the degree of segregation?
* How does the model change if people move randomly vs. move somewhere nearby?

**Write-up Guidelines (~2-4 pages):** Your write-up should include the following five sections. The number of points assigned to each section is in parentheses.

**Title**

Provide a descriptive and specific title, not "Schelling’s Segregation Model". Ideally, it

should highlight an essential finding.

***Background***

In a paragraph or two, describe the basic Schelling’s Segregation Model. You should describe the rules for moving and the independent variables (i.e. similarity threshold, population demographics).

Schelling’s Model is a simulation used to model diversity and segregation. It uses a cell grid and assigns each cell a value. The model assumes that an ‘A’ or a ‘B’ will move if there are not enough similar cells. The possible values are ‘ ‘, ‘A’, ‘B’. It then sweeps through every cell and does certain things depending on what it finds in the cell and the 8 cells surrounding it. If the cell contains a ‘ ‘ it does nothing. If the cell contains a ‘A’ or a ‘B’ it checks if the proportion of similar cells (if ‘A’ then similar means ‘A’) and if the proportion is less then the threshold, T, it moves to the nearest empty cell or a select cell, or whatever the model is set to do. The goal is to model population in dense environments such as cities.

***Objective***

Provide a description of the questions and ideas you investigated using Schelling’s Segregation Model.

I sought to see how the basic model would behave if unhappy cells moved to the closest empty cell as opposed to a random empty cell. Checking how long it would take for the system to reach equilibrium.

***Methods***

Provide a high level description of the code you wrote to answer these questions. One way to organize this section is with a brief description of the methods used to create the basic model and then a description of how you adapted this model to ask additional questions.

Checking around in a 3\*3 grid around the cell and if that turns up nothing then checking in a 5\*5 grid around the cell and so on and so forth. Using the try command to account for outside of grid scenarios.

Creating a empty list, shuffling it, and then using the first one to assign coordinates.

***Results***

Describe your important *qualitative* and *quantitative* findings. Use tables and graphs as appropriate.

**An example of a quantitative finding:** this is how the segregation index changed for my change to the model (graph)

**An example of a qualitative finding:** the different groups were in more pods with a particularly change.

Here would be a great spot to show a sample run of your code.

***Discussion***

Here is where you should discuss your results.

Did you find what you expected to find?

What sociological implications do your findings have?

What are some of the limitations of the model?

**Presentation Guidelines (5-10 minutes)**

You will present your findings on Tuesday 11/24 during our finals block. Your presentation does not need to cover the findings of the basic model. You should highlight the work you did to extend the model, including your objectives, methods, results, and discussion. Your presentation should include a demo of your code and graphs/tables/figures as appropriate to highlight your findings.