Writing a graphing, salting, and smoothing program in 3 different ways was interesting. Below I will discuss the differences between the programs and review each one. All images are included in the individual folders for the different coding method. They will be attached to this document towards the end to show the varying differences between each method used.

The first part of this assignment was to just code the grapher, salter, and smoother. Each program provided a csv file in which the data provided could be used to produce a graph. The difficult part of this I would say was the salter part because it took many attempts at tweaking the code to produce a graph that did not look exactly like the graph produced in the graphing program. Smoothing the data out was easier than salting it and getting a graph that was similar to the original was easy.

Next was the MATLab programming of the grapher, salter, and smoother. I know you said to do a tutorial, but I know a couple of people who have used it before and I did it last semester so I did not need to do a tutorial. It was straightforward and dare I say way easier than learning JAVA or Python. I took my code from last semester and tweaked the equations to fit what you had requested this time around. The CSV file for the second two programs were not required because it takes the files provided in the grapher program and tweaks it.

Finally was using the JFree and Apache libraries with the java code. This was slightly more challenging because the coding environment I use made it way more difficult get the libraries to function properly. Once I got them both working properly it was smooth sailing for the most part. The only real issue I had was distinguishing the csv files produced from this code from the ones produced by the first set of programs because I was not creative enough to come up with different names. I did eventually separated the programs out into respective folders to upload to github which made it easier to distinguish the csv files. Below is the pictures from each of the programs.

Regular JAVA programs:

A graph with lines and numbers

AI-generated content may be incorrect.

A graph with colored lines and numbers

AI-generated content may be incorrect.

A graph on a white sheet

AI-generated content may be incorrect.

MATLab Graphings:

A screen shot of a computer

AI-generated content may be incorrect.

A screen shot of a computer

AI-generated content may be incorrect.

A screen shot of a computer

AI-generated content may be incorrect.

JFree and Apache Library:

A graph with a line and numbers

AI-generated content may be incorrect.

A graph with colored lines

AI-generated content may be incorrect.

A graph with colored lines

AI-generated content may be incorrect.