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The following is a summary of the discoveries I made when examining the plotting, salting, and smoothing program. Due to my previous research when analyzing the first part of my plotting, salting, and smoothing program, I will be experimenting with 2 different bounds, 0-25 and 0-50. Along with that, I will be examining the values I use for smoothing and salting. More specifically, the smoothing values that I use will be the minimum and maximum smoothing window values allowed to see how different both graphs appear. Also, for salting, I will be using the maximum value, different from the original PSS (plotting, salting, and smoothing) report, and about half of the maximum value. Starting off, the normal data set still holds the appearance of half of a U-shape, staying consistent with the previous findings. The salting and smoothing graph results will be discussed throughout the rest of the report.

When examining the graph for the salted data, looking at both the graphs for half of the maximum and the maximum value, they are consistently salted with the values used. Particularly, the graph with the range 0-25 that has a salted value of 65 (about half of the maximum) is visibly salted, with the points going up and down at an inconsistent pattern. When looking at the graph with the maximum value, the graph travels up and down a lot more with the pattern still remaining inconsistent, but with more extreme change in values. Remaining on the 0-25 range graphs, the smooth graphs do its best to obtain a linear line but the data set being a pretty high value makes it harder to do so. The smoothed graph for the same range but at the maximum window value appears more linear than the graph with the minimum window value, remaining consistent with the intention of higher window values for smoothing a graph out.

The next range that was used was 0-50 and the results for the salted and smoothed graphs draw parallels to the graphs for 0-25. The normal graph for 0-50 goes above 2500 when it comes to the “y” values and looking at the smoothed graphs, they remain below or near 2500 but don't go above it. Looking at the smoothed graph with the maximum window value, it appears to be noticeably more below 2500 compared to the smoothed graph with minimum window value. As for the salted graphs, the graph with half of the maximum salt value travels up and down a great deal. However, the points are bunched together well enough so that a linear line can travel about it, reaching most points if it were to attempt to connect it. As for the graph with the maximum salt value, it also travels up and down with a more extreme change in values occurring compared to the other salted graph. When noting the observations I've made for this PSS compared to the one in BlueJ, this one is more noticeably salted or smoothed when looking at the graphs here. This is in comparison to the graphs that can be made in Excel after making the CSV file and salting or smoothing the data in BlueJ. By that, I mean the logic of this program follows more closely the intention of the values set aside for salting or smoothing when comparing it to the graphs that can be made in Excel. If I were to pick which of the two to use for less issues and more consistency, it would be Octave over coding Java in BlueJ.