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Lab Report

For this lab, I decided to make an extra class to handle all the hashings and calculations, so my main wouldn't look so cluttered. In my extra class, Executive, I had the primary method, run(), which would take in the load factor. This method would call on three other methods to insert the proper number of elements into a hash table by three different ways. The three ways were the open hash, double closed hash, and quadratic closed hash, and each of the three methods would insert values and reset the table to test the time again for five times. Next, I called on a method to average out the time values of the five tests for each hash method for each load factor.

Located in this folder is a table of my data and a graph of the average times vs load factor. Each line represents a different hash method. I am positive my data is incorrect, since it takes at least 200 seconds to run the double hash method and the quadratic hash method. This seems to be way too much time for such things and believe it is an error within my code of the hash methods. On top of that, my open hash method was the quickest one, not taking even a second to complete the insertions. My double hash and quadratic hash were pretty similar going from 200 seconds to a little over 1000 seconds.

In conclusion, my data is full of errors and I have no idea why. It took way too long to wait for this. I ran the program on my MacBook Air, which as fast as if it were on the machines in the labs.