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Hw4

For this assignment, I was able to accomplish the tasks very well, especially considering that the task given was very similar in nature to that of homework 3, but with significantly simpler implementation of the code. Utilizing pragma OMP, I was able to introduce threading in a significantly simpler manner than the multi-step process that was required for std threads to be implemented. For part 1, working on the std thread part of the assignment, I implemented 3 total parallel sections. One included finding the mean and the min and max, the second was utilized to find the std calculation, and the final was used in the threshold method to find the value c for building the threshold array. I could have found a way to implement threading on the final loop in this section, however I ran into difficulty on this part. For all of the parallel regions I implemented, I used P threads so that this number of threads could be changed depending on the desires of the user without having to change any hardcoded options.