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Lab 7 Report

Time Performance for My Program

I calculated the performance of my program and the result is 2n2+13. That number can be improved but honestly this is the best thing I came up with. I was doing this lab in a way that was much longer so this is a major improvement. The program runs in a way to optimize efficiency and get the desired result on every input. I tested it with varying input across a wide range and it passed each one. The overall performance of my program is O(n2).

The best case would be if there is only one element in the array in the array because all the step would only run once, however, unfortunately, the worst and average case are the same, because no matter what the program will always be it will always run n2.