CptS223 HW#4 Report

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A: Problem Statement:

For this assignment I will be comparing the performance of the four different algorithms we discussed in class for the maximum subsequence sum problem.

B: Experimental Setup:

Processor: Intel(R) Core(TM) i7-6700HQ CPU @ 2.60GHz

RAM: 16GB

OS: Windows 10

I conducted 10 experiments each until the last 2 input sizes as the test time went over an hour.

C: Experimental Results:

I was not expecting maxSubSum1 to go over 1 hour. Especially at only 4096 inputs. I thought the reason the “over 1hr” part of the assignment was included was for very slow computers. The difference between maxSubSum1 and maxSubSum2 also shocked me. The change from O(N^3) to O(N^2) is much more eye-opening when you do it yourself rather than read about it.