

In-Class Assignment

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1 Part F

The program runs faster with multiple threads, but once you get to very high thread counts, the speedup is unpredictable or nonexistent. The answer is most precise at lower thread counts, but it seems to be consistent for a given thread count for some reason.

2 Part J

I was unable to run my program on the New River cluster (I tried several potential batch scripts, but each one failed due to node availability/suitability). Instead, I ran the program locally to track the behavior of the runtime vs. number of OpenMP threads. I see an exponential decrease in runtime until a leveling off around 12 threads.

I see that there are higher speedup patterns (similar speedups) with low thread counts, then marginal benefit decreases at higher thread counts.