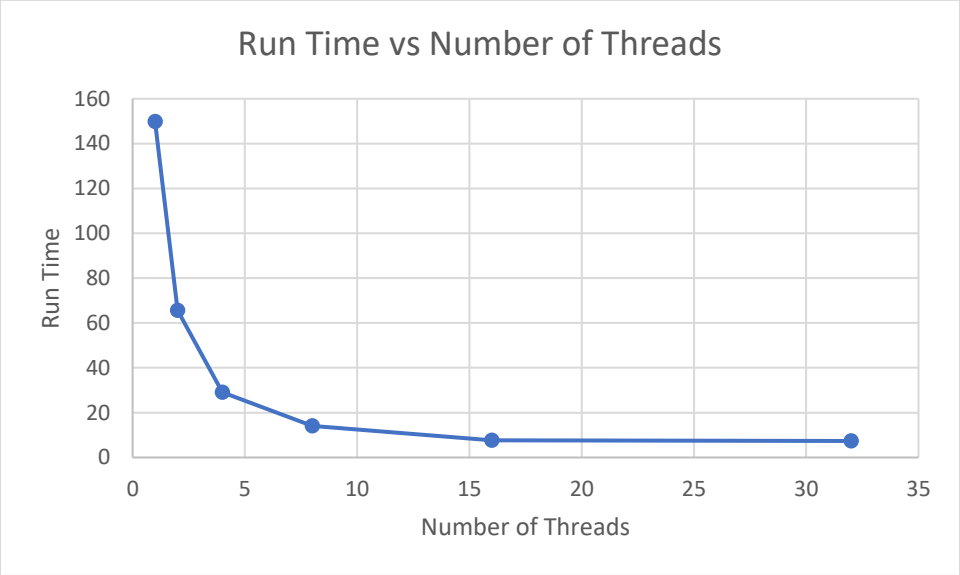
Hart Russell

CS-605

HW1 (Base 0)



As we can see from the graph, the run time is directly correlated with the number of threads. However, we see diminishing returns for number of threads added, especially as we go from 16 to 32. This is most likely due to two factors:

1. The size of the matrix isn't big enough. Increasing the complexity of the problem might show a disparity between 16 and 32 threads
2. The cpu has 16 cores. Even though it is hyperthreaded and should technically benefit from 32 threads, we might see a different story from a cpu that has 32 physical cores.

Valgrind report can be found in the directory as well. It shows no memory leaks.

I made a separate batch file for each thread count. Those and the corresponding time results can also be found in the hw1 dir.