

# AMATH583 Homework 4

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May 17, 2023

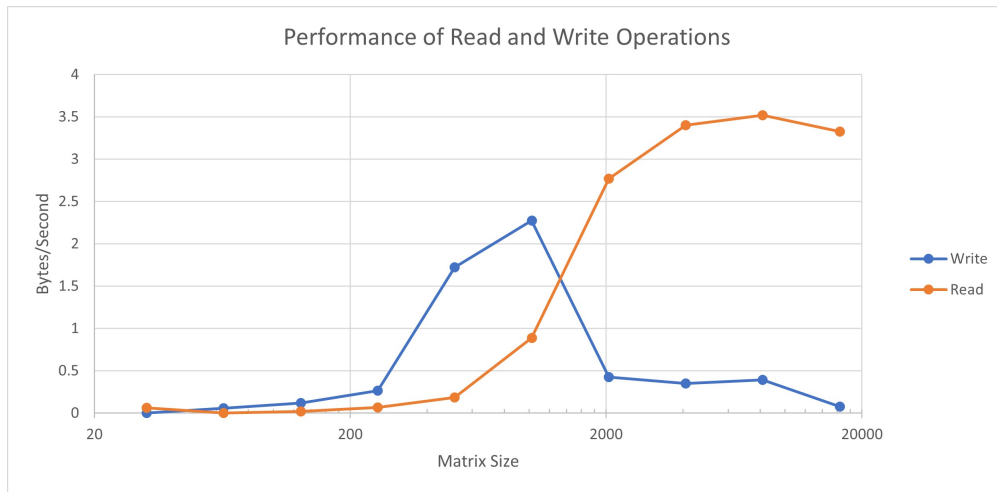


Figure 1: This figure shows the bandwidth of conducting read and write operations for double binary square matrices on my computer.

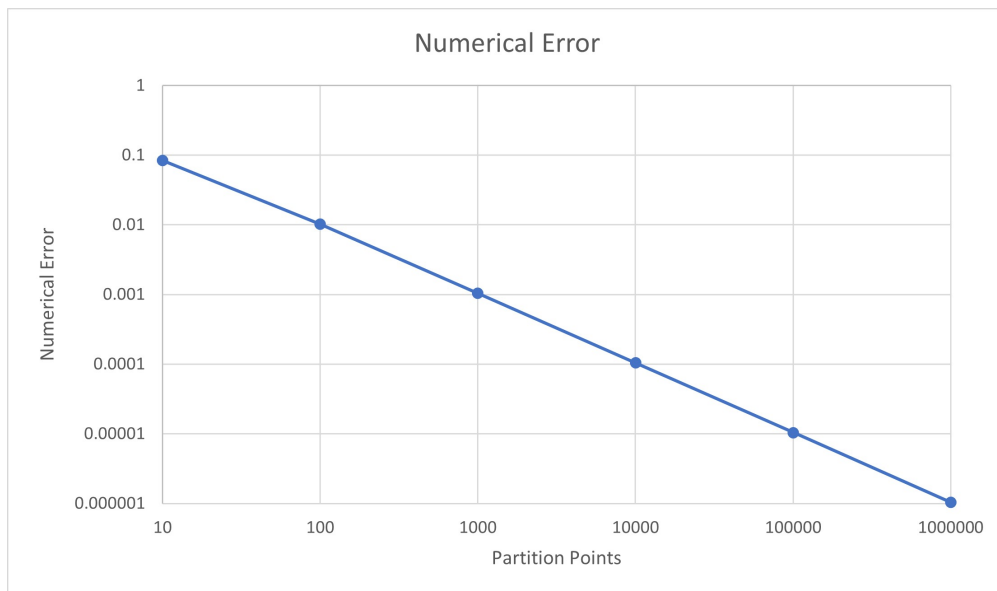


Figure 2: This figure shows the error associated with numerically evaluating the length of a function using the C++ threads library.

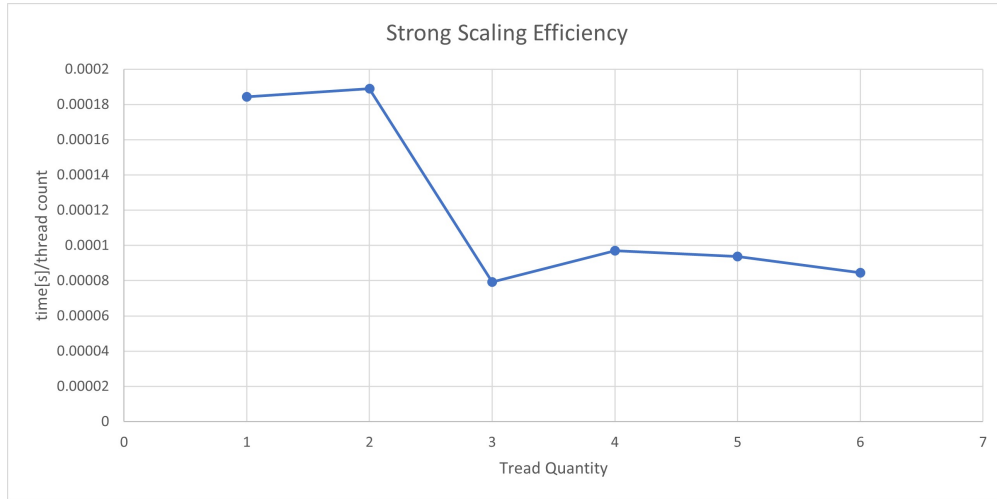


Figure 3: This figure shows the increase in efficiency for performing the length calculation in problem 2 as the number of threads grows from 1 to 6.

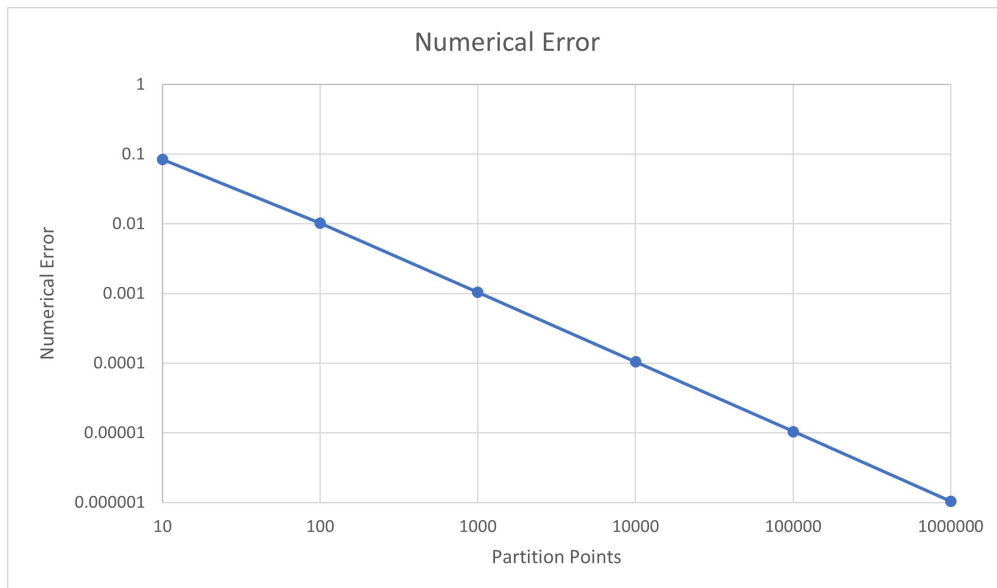


Figure 4: This figure shows the error associated with numerically evaluating the length of a function using MPI.

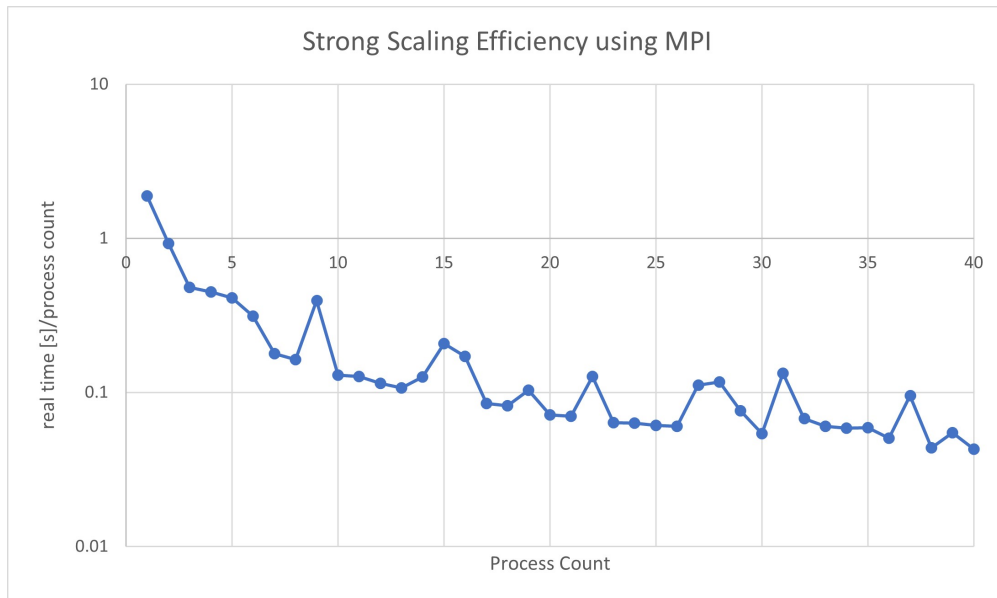


Figure 5: This figure shows the increase in efficiency for performing the length calculation in problem 3 as the number of processes grows from 1 to 40.