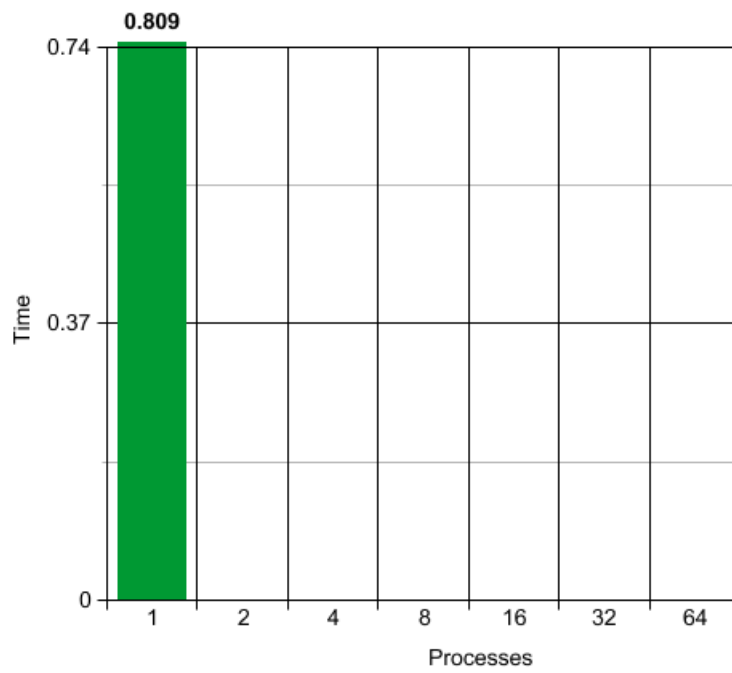


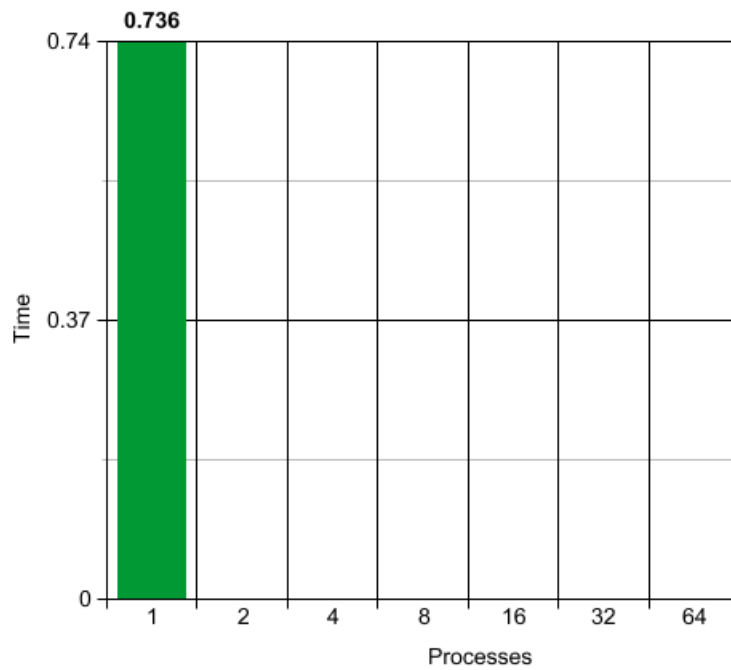
# Graphs and Conclusions Lab 1

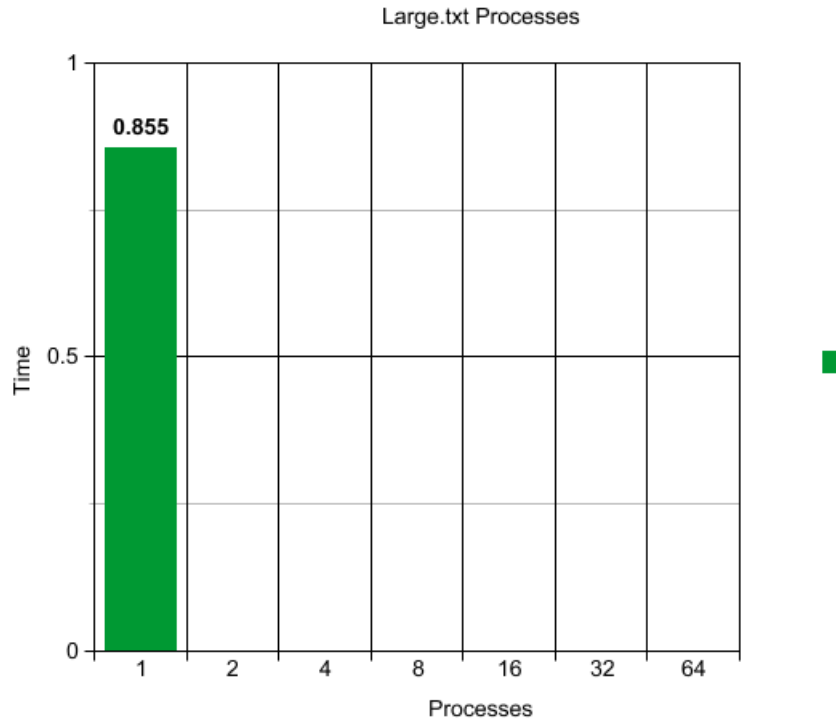
Andrew Gaffney

Small.txt Processes



Medium.txt Processes





Each of the above graphs times is an average of 5 time trials.

#### Conclusions:

My attempt at parallelizing the code failed and thus the above graphs only display the times of sequential runs of the equation solving algorithm. As such, the times remained relatively low and consistent across the differing input sizes. This was largely due to the lack of communication overhead that would have arisen from the parallel code functioning correctly (instead it segfaults). Despite this, there is still a tiny amount of overhead for process 0 calling `MPI_Scatter` and `MPI_Gather` so the processing times are not quite as fast as they could have been had these calls been completely absent from the code.