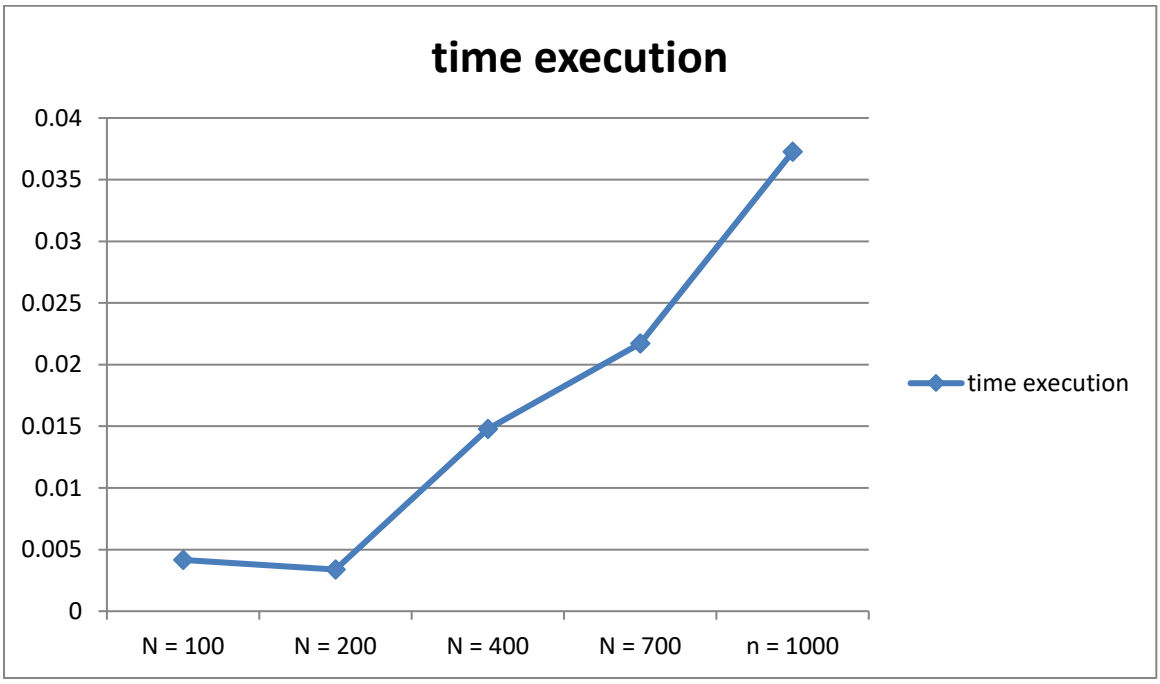
CS-342, Project 3

Cüneyt Erem 21202398

Talgar Marlis Uulu 21202918

Project 3 Report

1) **Fix M. Change N. Measure the time to execute a multi-threaded program for various N values. Plot N versus running time. Try to fit a linear curve to this plot.**



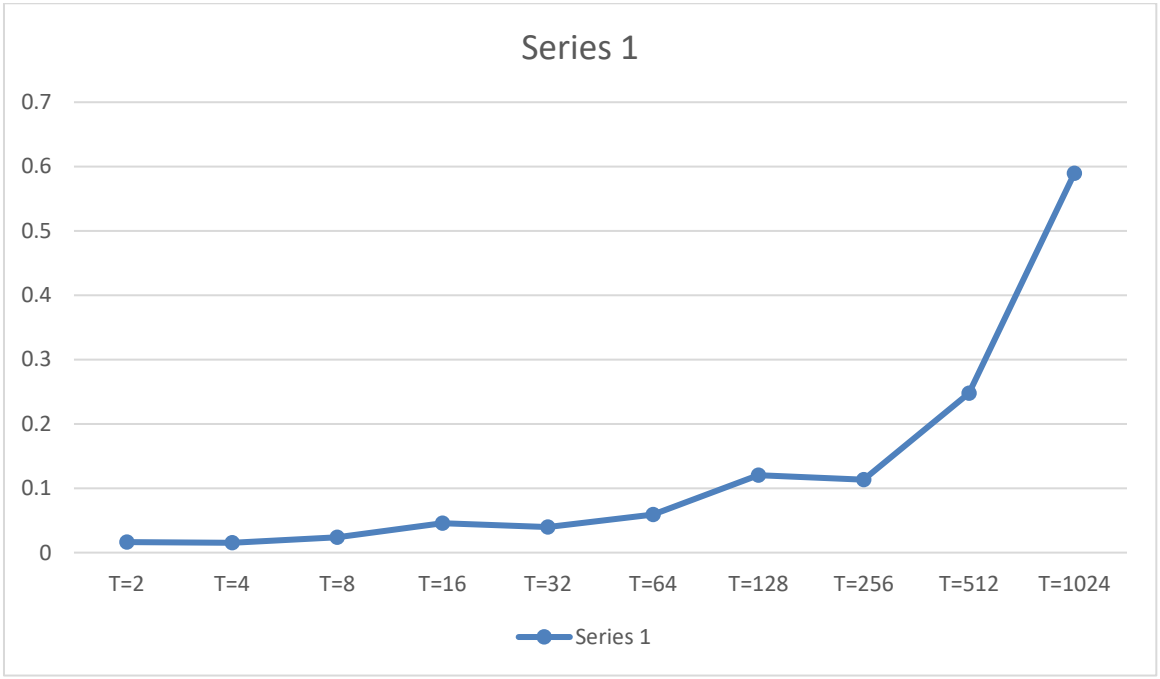
2) For a fixed N and M, execute a multi-threaded program 100 times and find the mean and variance of program execution time.

Fixed N = 500 and M = 10;

Mean: 0,016433752631579

Variance: 0,006530081

3) For a fixed N and M, execute a multi-threaded program with various number of threads such as 1, 2, 4, 8, 32, 64 and measure the time it takes to execute the program. Plot the number of threads versus running time. Try to fit a linear curve to this plot if possible. If not explain the reason.



4) **Fix N and change M so that K changes between 1 and 100 at increments of 10. For each K value (M value), for the same program, measure the time it takes to execute the program that is creating a lot of threads where these threads are doing a lot of table operations concurrently. Plot K versus time-to-execute the program. Try to fit a linear curve to this if possible. If not explain the reason.**