CSC 4760/6750, Fall 2015

Programming Assignment 3

Assign date: October 9, 2015, Due: October 16, 2015

For this assignment you need to write an OpenMP version of the matrix - matrix multiplication in C. You can assume matrices are square matrix. The size of the matrix and no of threads should be command line arguments to your program. The main thread should create the matrices and generate random numbers (use double) to populate the matrices. The thread function should perform the matrix-matrix multiplication. Run your code for problem size 5000 with 2, 4, and 8. Also run your Pthread matrix multiplication program with same configuration. Write a report comparing the execution time and speed up of pthread and OpenMP implementation (provide graph). When measuring the execution take average of two run.

Submission:

Submit a copy of your code, a readme file (how to compile and run your code), and the report on ilearn. Also submit a printed of your report.

Grading:

Total:

Report: 20 Points Program: 80 Points 100 Points