

Concurrent Programming - Spring 2022 - Homework 4

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If you have any question, you can raise it in the WhatsApp group or send a message to the telegram ID : @mmovahed02.

Problem

In this assignment, you should implement a parallel program for matrix multiplication.

Description

In this part you write a parallel algorithm for matrix multiplication which should be implemented on the shared memory platform using Open-MP.

Afterwards check all scheduling methods such as static and dynamic one. Also you can use random function to fill the numbers in the matrix. By considering the various size for the input matrix, you can check the speed up of each scheduling technique for different size of the input matrix.

Reporting the running time of the algorithm is mandatory for serial and parallel implementations (with static and dynamic scheduling).

It is necessary to report the specifications of the execution platform in the document. Also you should use comments to explain the codes

Utilities

- Library: OpenMP
- Languages: C, C++, Fortran