Faculty of Computers and Information Cairo University Spring-2020



Parallel Processing- 2020 Assignment 3 – Open MP

Deadline & Submission:

- 1. The assignment is individual.
- 2. The deadline for submitting the solution on Thursday, 30 April @11:59 PM.
- 3. Submission will be on Google Class Room.
- 4. Code must be in C and Open MP & you must run it before sending.
- 5. Cheating could lead to serious consequences.

Assignment Title:

Matrix Addition

Problem Statement:

You will develop a parallel program using Open MP of "The Matrix Addition".

As you need to optimize the whole process time by spreading the problem across threads.

Here is an example for matrix addition between matrix X and matrix Y.

Example:

$$\begin{bmatrix} 1 & 2 \\ -3 & 4 \end{bmatrix} + \begin{bmatrix} 4 & 3 \\ 5 & -1 \end{bmatrix} = \begin{bmatrix} 1+4 & 2+3 \\ -3+5 & 4+(-1) \end{bmatrix}$$
$$= \begin{bmatrix} 5 & 5 \\ 2 & 3 \end{bmatrix}$$

Error handling: Modify your solution with prints if invalid operation or so!