In the Name of God

Parallel Algorithms, Spring 2020

Homework #3: OpenMP

Due date:

Livermore loops (also known as the Livermore kernels), which was published in 1986, is a benchmark for parallel computers. It was created by Francis H. McMahon from scientific source codes. It consists of 24 do loops.

- Each student is supposed to optimize 5 consequence loops using OpenMP.
- You should write a complete report, including:
  - Your computer's specifications (including the number of CPU cores, memory, …)
  - An explanation of how to run your code (Linux command to run your code)
  - An explanation of your approach for each loop
  - A comparison between the execution time of **each loop** before and after optimization in milliseconds, and speed-up value for each loop.

Reminders:

- Each HW has to be done individually (**For assignments that are similar to each other, the grade is 0.)**
- 50% of your points belong to the report.
- Your codes and the report should only be submitted before the due date through email to TA (**majidsalimib@gmail.com**) with the "homework number" as the subject of email.
- In-person delivery will be announced.