



Parallel Algorithms - Spring 2024

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Teacher Assistant:

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Homework 3

Deadline: 28/02/1403

In this homework, you are going to use OpenMP and arbitrary loop transformation techniques (like loop unrolling and loop tiling) to parallelize the C version of kernels number 1, 3, 5, and 6 of the [Livermore Loops](#). Try to achieve maximum parallelization (in each kernel, try to parallelize as many loops as possible). In the end, evaluate your parallelized code using profiling tools and compare it with the sequential version.

Report Format:

An explanation of how to run your code (Linux command to run your code).

A complete analysis of your profiling at each step.

Reminders:

Each homework has to be done individually.

Send the report and the source code as a ZIP file to saraabbasi847@gmail.com. File's name and email subject should be like this:

PA-S24-YOUR NAME-YOUR STUDENT NUMBER-HW3

Best of Luck!