# My First Multi-Threading

## Assignment 1 (exercise):

Look at the code in the directory mt\_example and try to understand it. Build and run it several times. Notice what’s happening. You can add your own code by e.g. printing out thread id’s.

## Assignment 2 (mergeSort):

If you haven’t implemented mergeSort yet in your first assignment, please look at it and try to understand (e.g. at <https://www.geeksforgeeks.org/merge-sort/>)

Now we’re going to add multithreading aspect to this algorithm. Take the ready algorithm that can be found at <https://www.geeksforgeeks.org/merge-sort-using-multi-threading/> as a basis.

Incorporate it in the assignment 5 that is created for you in the GIT repository.

This assignment takes 1 input file “in” for the testing.

If you successfully incorporated this algorithm in the code of ass5, try to change the number of threads to e.g. 2 or 1. Once you have done it, what code you can omit? Is it easy to change the number of threads to any value? Do you see any performance increase?

Please reflect your findings in a short reflection document.

*Tip:*

Watch out for the use of hard-coded values in the code.