Report LabWork1

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1 Introduction

We had to "Convert" an existing labwork sequential CPU code to parallel using OpenMP.

2 Code

I just needed to add the following line in the code :
pragma omp parallel for
This was just before the main for loop, it allow the computer to create thread for each call of the "for" instruction. With that instruction we expect to reduce the time of execution of the code, depending on the number of cores of the machine. After the execution we have this result :

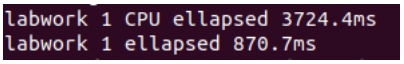

Figure 1: Capture of the execution

3 Conclusion

We can see that the execution time has been divided by four, we can imagine it is the number of cores of the machine, but we can't make any speculation with just one test, we should use several tests to make a real conclusion. Anyway, we can see that the execution time is really reduced thanks to parallelisation, it shows how powerful can it be to use this tool.