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Parallélisme TP6

RESULTS :

I managed to fill the .cu file without problems, and compile the code and execute it as well, but when I tried to re-execute with different parameters to obtain different results, it did not work.

DISCUSSION:

I can still discuss what results I expected, I expected this execution to be much faster than the CPU execution, GPUs are better equipped for this type of job, with better architectures and different optimisations, so it is only normal that they are better than CPUs at doing what they are supposed to do.

However, I do not know if a simple execution with GPU is better than a CPU that executes a dynamic algorithm, when coding, to be faster we can optimize both the algorithm and hardware, hardware wise GPU is the better one, but we do have to make an effort on the algorithm to take full advantage of the GPU. And in this exercise, we executed Julia with a simple code, no optimisation, so it might not be as good as the CPU with dynamic algorithm, as there we always optimise the uptime of every core.

If we had an optimized algorithm for GPU, I'm sure it would be faster than the CPU execution with dynamic algorithm.