

Report 3 Cuda

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1 Introduction

We wanted here to experiment the speed of the GPU, by using cuda.

2 Implementation

In order to do that we used the fonctions "cudaMalloc()" and "cudaMemcpy()", with that our GPU had our values, the GPU can manage the operations. The advantage is that our GPU is more powerful than our CPU, so we can speed up our program. Now let's compare the speed values depending on the block size.

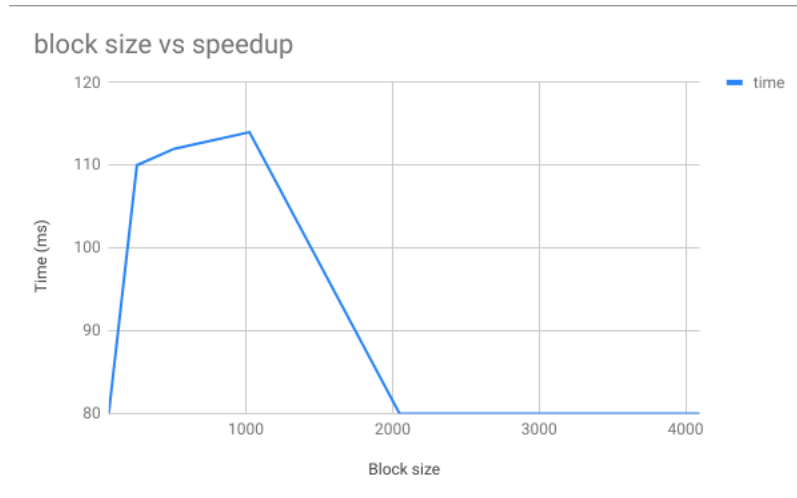


Figure 1: Graph Block size vs time

We can't really have conclusions on this graph because, first the time is not precise, with each measures we have like ± 10 ms variation that is significant compared with the time displayed.

3 Conclusion

By using cuda we can use our GPU to speedup our programs. Moreover the speed of our program depend on the size of the blocks, but with our measures we can't conclude on the impact of it.