

Report 4 Threads

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1 Introduction

The goal of this lab work were to implement the same program as in the lab work 3 but using 2D blocks.

2 Improvement

To do this improvement, we just changed the grid size and the block size by a 2D one like this :

```
"dim3 gridSize = dim3(8, 8);  
dim3 blockSize = dim3(32, 32);"
```

Then to see the impact of the block size on the time, we tried several block sizes and checked the time it took to execute the program :

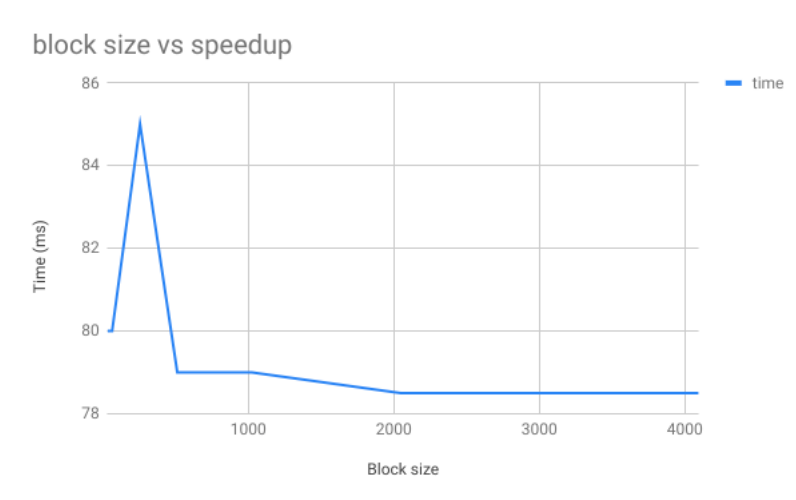


Figure 1: Block size vs time

3 Conclusion

Thanks to our graphic we can see that the 2D blocks brought us some stability in execution time, it even more relevant when we execute the same program with the same block size, the execution time is stable. It makes a contrast with our lab work 3. We can say that the 2D blocks brought us stability, moreover the time of execution here is comparable to the best execution time in normal blocks.