Testing configurations, implement, test, and compare the performance of Reduction by adding the following optimizations:

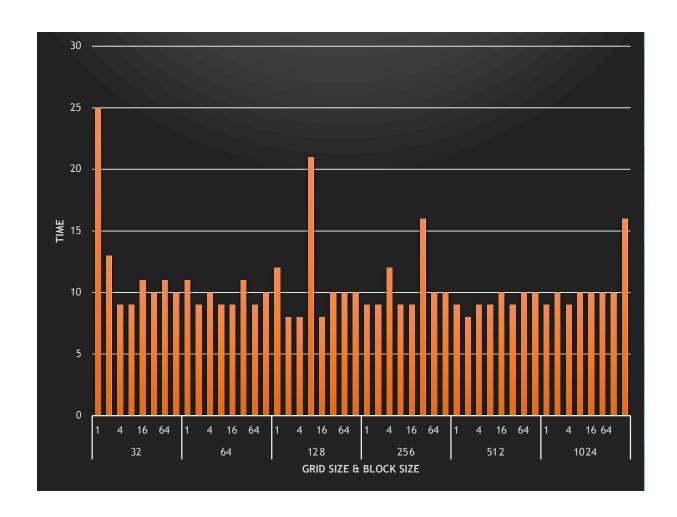
- 1. Loop unrolling
- 2. Warp shuffle instructions

For example, you should first add Loop unrolling on top of the kernel implementation with optimized thread organization. Then, on top of that, add warp shuffle instructions. After measuring their performance with the same launching parameters, you then can include two additional curves in your previously drawn figure in the assignment and explain your observations.

Things to submit:

- 1. Your working folder in a zip file for your comparison program.
- 2. A pdf report containing your timing output and a discussion about your findings.

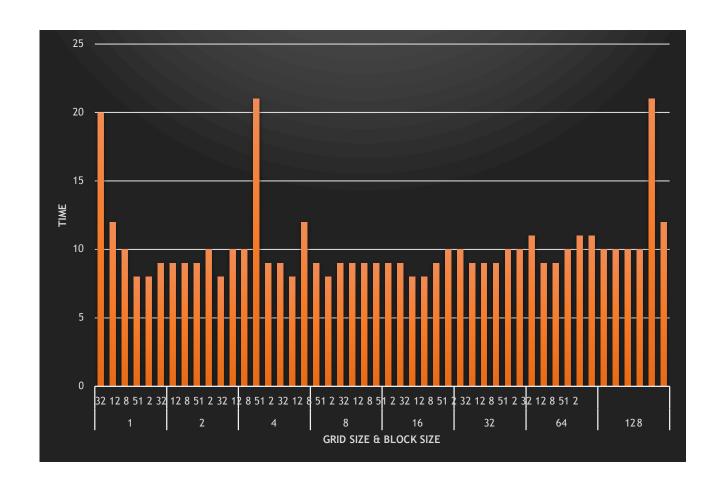
Group 3Sai Kashyap Kurella Karthik Bharadwaj



Loop Unroll

Conclusion:

Keeping the Block size same and changing the grid size, Time taken increases as we increase the grid size.



Warp Shuffle

Conclusion:

Keeping the grid size same and changing the Block size, Time taken nearly increases as we increase the Block size.