

I thought that the naive GPU implementation would be faster than the naive CPU implementation, but it was not. I thought that the recursive doubling implementation would be the fastest, and it was. The CPU implementation wasn't difficult, and it had a fairly good runtime across different array sizes. I ran each implementation with different array sizes to determine speed and of the implementation given the array size, and made a graph on Google Sheets. It was difficult to remember how to implement cuda memory to be able to run the program on the GPU. For the recursive doubling part, it was hard to remember how recursion could be used in the context of this assignment. It was also difficult to run the implementations on larger array sizes, because they would take so long. If I were to reapproach this assignment differently, I would try to look at ways the recursive element could be applied and try to see how the program would call itself.