This homework is super challenging. Implementing single thread and naïve algorithm is not that hard, but for recursive doubling, we cannot adopt array size greater than 6000 since shared memory won’t be able to handle much data, which challenges me since every recursive doubling function I’ve learned online or on textbook used shared memory to perform the task. I tried not to use shared memory but use the iteration stride instead, and it works perfectly for array size = 100 and 1000, but failed for 10000. Also, the graph shows that it doesn’t outcompete the other 2 algorithms in running time, which is a surprising finding because theoretically it should.