Susan Liu 933237062 CS 475 Professor Bailey 5/4/2021

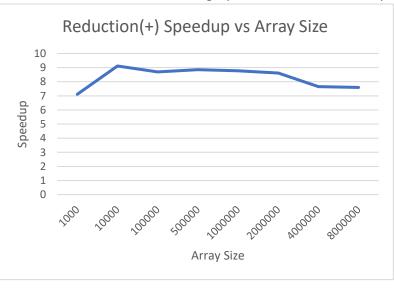
Assignment 4

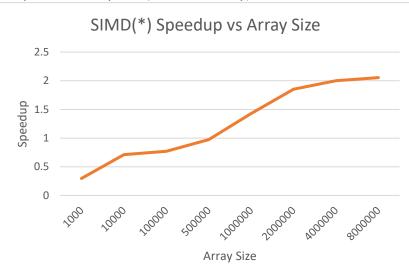
1. What machine you ran this on I ran this on Rabbit

2. Show the table of performances for each array size and the corresponding speedups

	1000	10000	100000	500000	1000000	2000000	4000000	8000000
Reduction:	7.11326	9.11448	8.69251	8.85869	8.76899	8.61364	7.65526	7.59855
SIMD	0.29643	0.71184	0.77154	0.97315	1.42988	1.85435	2.00207	2.05486

3. Show the graph of SIMD/non-SIMD speedup versus array size (one curve only)





- 4. What patterns are you seeing in the speedups?
 As the array size increases the speedup increases for SIMD, but for reduction it increased before slightly decreasing and leveling out.
- 5. Are they consistent across a variety of array sizes? Why or why not, do you think? For SIMD the speedup was pretty constant while for Reduction there was a slight spike in speed up which I found this quite strange. However, when I looked at the uptime I noticed that one user had joined which could have caused the slight spike in the reduction speed up. The reason I think that the speedup for SIMD increased as the array size increased is because it took up more memory when the array size increased which caused the speed up to increase.