

## CS 575 Project #4

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### 1. Tell what machine you ran this on.

OS: macOS

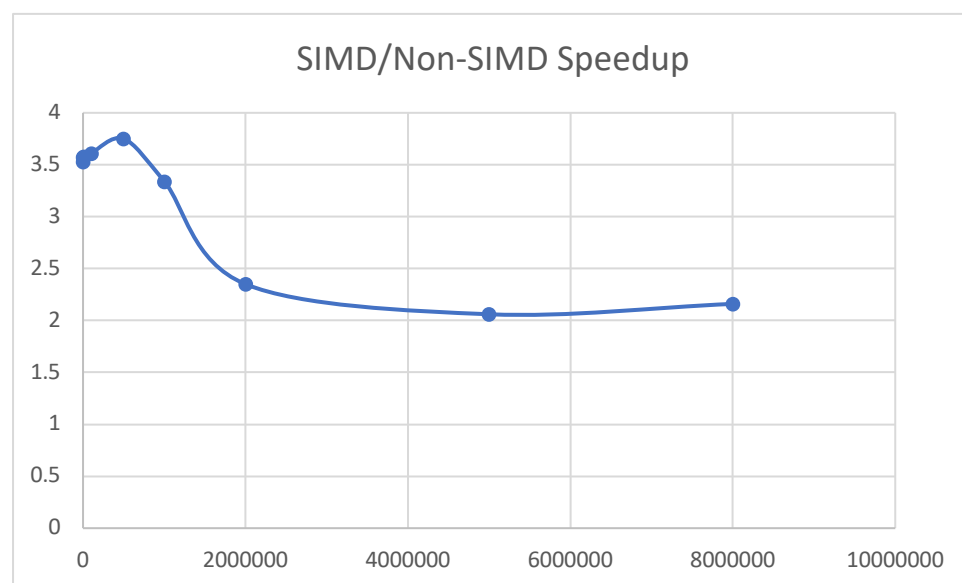
Memory: 8GB

Processor: 2.9GHz dual-core Intel Core i5 processor

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

	1000	5000	10000	100000	500000	1000000	2000000	5000000	8000000
Speedup	3.57	3.53	3.58	3.61	3.75	3.34	2.35	2.06	2.16

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



### 4. What patterns are you seeing in the speedups?

When the array size is small, the speedup is higher. However, when the array size becomes much larger, then the value of speedup tends to be a constant value, as shown in the graph.

### 5. Are they consistent across a variety of array sizes? Why or why not, do you think?

I do not think that they would be consistent between the different size of array because the speedup is at the higher value when the array size is small, but when the array size becomes larger, the value of speedup is not apparent as doing in small array size. In other words, the value of speedup is changing when the array size becomes bigger.