

Array Size (10,000 , 100,000 , 1,000,000 , 10,000,000 , 50,000,000 , 100,000,000 , 500,000,000)

Sequential Times:

10,000: 0.00107881
100,000: 0.0132131
1,000,000: 0.15462
10,000,000: 1.7883
50,000,000: 9.77209
100,000,000: 20.2987
500,000,000: 110.04

Parallel Times:

10,000: 0.001078
100,000: 0.00502471
1,000,000: 0.0619759
10,000,000: 0.647914
50,000,000: 3.35593
100,000,000: 7.07539
500,000,000: 39.0652

Speedup = sequential(1) / parallel(T)

Speedup:

$0.00107881 / 0.001078 = 1.001x$
 $0.0132131 / 0.00502471 = 2.63x$
 $0.15462 / 0.0619759 = 2.495x$
 $1.7883 / 0.647914 = 2.76x$
 $9.77209 / 3.35593 = 2.912x$
 $20.2987 / 7.07539 = 2.869x$
 $110.04 / 39.0652 = 2.817x$