

Assignment 1 Report

Q6:

```
443 //Print matrices a,b, and c.
444 printf("Matrix A");
445 puts("");
446 print_matrix(n1,n2,a);
447 puts("");
```

<terminated> (exit value: 0) Hw1_Final.exe [C/C++ Application]

Running mode q6:

Func: run_mode_q6
Running Matrix Test!

Matrix A

65.000000	2.000000	20.000000
39.000000	97.000000	12.000000
43.000000	66.000000	25.000000
78.000000	28.000000	14.000000

Matrix B

12.000000	62.000000
1.000000	19.000000
90.000000	12.000000

Matrix C

2582.000000	4308.000000
1645.000000	4405.000000
2832.000000	4220.000000
2224.000000	5536.000000

Program ran successfully!

www.mathsisfun.com · Matrix Calculator

Matrix Calculator

A: 4×3

65	2	20
39	97	12
43	66	25
78	28	14

B: 3×2

12	62
1	19
90	12

A+B A-B AB det
A=I B=I A↔B A^T B^T

AB=

2582	4308
1645	4405
2832	4220
2224	5536

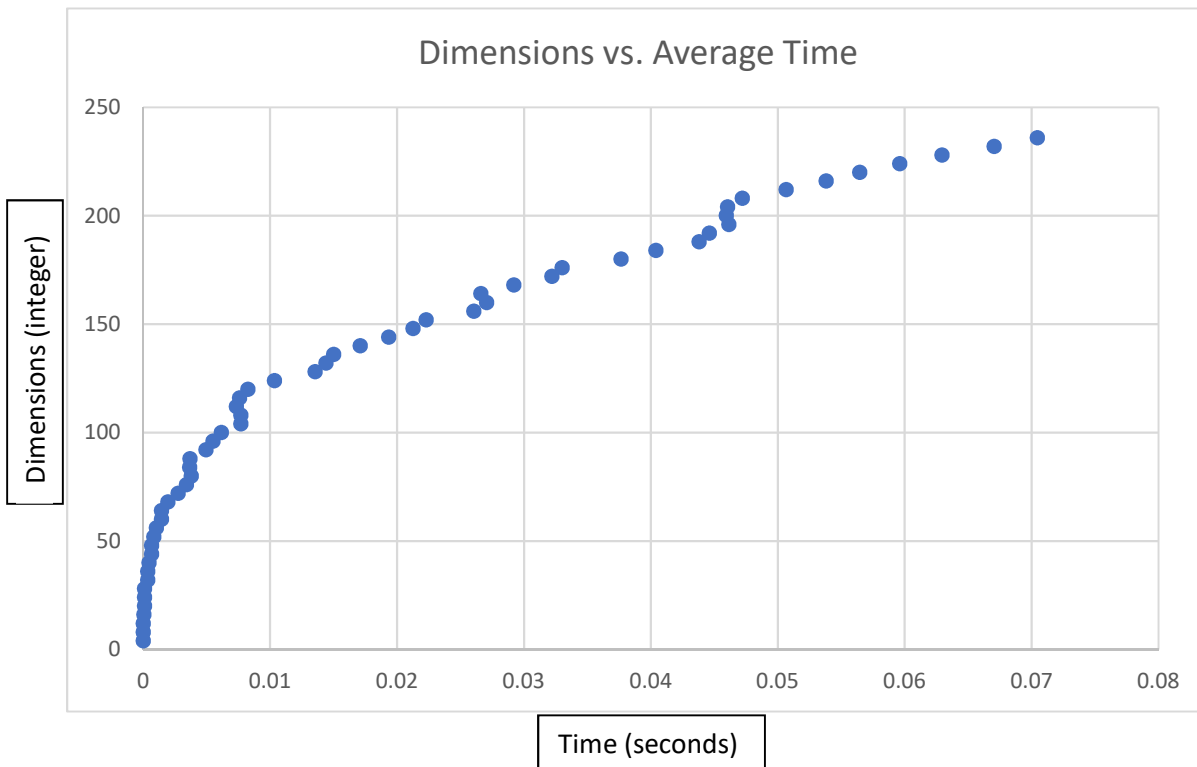
cB
to A
to B

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DATA ENTRY

Enter your matrix in the cells below "A" or "B".

Q8:



I expected the graph to have a concave curve rather than a convex, log-like curve. This is because I assumed that as n increases, n^2 increases even more quickly, resulting in a bigger difference in average time from that of $n-1$ dimensions. However, it makes sense for this graph to have this shape, because when n is low, there is a bigger percentage increase between steps compared to when n is very high. Thus, it seems that running an algorithm on a large matrix is much more efficient than running many algorithms on multiple, smaller matrices.