Lab3 Documentation

**Hardware:** Sum and multiplication of two matrices done using :

- 4GB RAM Memory - 1 thread

- 2.30 GHz Quad Core Intel i5-6300HQ - n threads

- Nvidia GTX 950M 2GB - nXn threads

- 64-bit Windows 10

**C#:**

Tasks:

Sum: Mul:

Test 1: Test1:

-1 Thread -1 Thread

-4X4 Matrices -4X4 Matrices

-Time taken: 0.0001568 sec - Time taken: 0.0001662 sec

Test 2: Test2:

-n Threads -n Threads

-4X4 Matrices -4X4 Matrices

-Time taken: 0.0001982 sec -Time taken: 0.0002048 sec

Test3: Test3:

-nXn Threads -nXn Threads

-4X4 Matrices -4X4 Matrices

-Time taken: 0.0002528 sec -Time taken: 0.0002871 sec

Thread Pool:

Sum: Mul:

Test 1: Test1:

-1 Thread -1 Thread

-4X4 Matrices -4X4 Matrices

-Time taken: 0.0000617 sec - Time taken: 0.0000871 sec

Test 2: Test2:

-n Threads -n Threads

-4X4 Matrices -4X4 Matrices

-Time taken: 0.0000711 sec -Time taken: 0.0001097 sec

Test3: Test3:

-nXn Threads -nXn Threads

-4X4 Matrices -4X4 Matrices

-Time taken: 0.0000764 sec -Time taken: 0.0001684 sec

**C++**

Future:

Sum: Mul:

Test 1: Test1:

-1 Thread -1 Thread

-4X4 Matrices -4X4 Matrices

-Time taken: 0.0000001 sec - Time taken: 0.00000001 sec

Test 2: Test2:

-n Threads -n Threads

-4X4 Matrices -4X4 Matrices

-Time taken: 0.00000002 sec -Time taken:0.0000005 sec

Test3: Test3:

-nXn Threads -nXn Threads

-4X4 Matrices -4X4 Matrices

-Time taken:0.0000010 sec -Time taken:0.0000020 sec

Thread Pool:

Sum: Mul:

Test 1: Test1:

-1 Thread -1 Thread

-4X4 Matrices -4X4 Matrices

-Time taken:0.0000005 sec - Time taken:0.0000006 sec

Test 2: Test2:

-n Threads -n Threads

-4X4 Matrices -4X4 Matrices

-Time taken:0.0000007 sec -Time taken:0.0000012 sec

Test3: Test3:

-nXn Threads -nXn Threads

-4X4 Matrices -4X4 Matrices

-Time taken:0.0000010 sec -Time taken:0.0000015 sec