Производилось одно умножение двух квадратных матриц 1000х1000 с заранее сгенерированными случайными числами в диапазоне от 0 до 10. Время непосредственно умножения без чтения приведено в графиках для каждой программы.

1. MPI

AMD Ryzen 3 2200G with Radeon Vega Graphics 3.50 (

PS D:\Uniyar\parallel_prog> mpiexec -n 1 lab1.exe
Dimension of the matrices is 1000x1000

Started data reading Time spent on reading: 8.3369 Time spent on calculation: 5.07587

PS D:\Uniyar\parallel_prog> mpiexec -n 2 lab1.exe

Dimension of the matrices is 1000×1000

Started data reading

Time spent on reading: 8.4302
Time spent on calculation: 2.6446

PS D:\Uniyar\parallel_prog> mpiexec -n 3 lab1.exe

Dimension of the matrices is 1000x1000

Started data reading

Time spent on reading: 8.24009
Time spent on calculation: 1.96459

PS D:\Uniyar\parallel_prog> mpiexec -n 4 lab1.exe

Dimension of the matrices is 1000x1000

Started data reading

Time spent on reading: 8.32822

Time spent on calculation: 1.35383

PS D:\Uniyar\parallel_prog> mpiexec -n 5 lab1.exe

Dimension of the matrices is 1000×1000

Started data reading

Time spent on reading: 8.21702
Time spent on calculation: 1.3643

PS D:\Uniyar\parallel_prog> mpiexec -n 6 lab1.exe

Dimension of the matrices is 1000×1000

Started data reading

Time spent on reading: 8.30783
Time spent on calculation: 1.39524

PS D:\Uniyar\parallel_prog> mpiexec -n 7 lab1.exe

Dimension of the matrices is 1000×1000

Started data reading

Time spent on reading: 8.35814
Time spent on calculation: 1.53124

PS D:\Uniyar\parallel_prog> mpiexec -n 8 lab1.exe

Dimension of the matrices is 1000x1000

Started data reading

Time spent on reading: 8.41377
Time spent on calculation: 1.53235

PS D:\Uniyar\parallel_prog> mpiexec -n 9 lab1.exe

Dimension of the matrices is 1000x1000

Started data reading

Time spent on reading: 8.32379
Time spent on calculation: 1.44738

PS D:\Uniyar\parallel_prog> mpiexec -n 10 lab1.exe

Dimension of the matrices is 1000x1000

Started data reading

Time spent on reading: 8.3141
Time spent on calculation: 1.4774

PS D:\Uniyar\parallel_prog> mpiexec -n 11 lab1.exe

Dimension of the matrices is 1000x1000

Started data reading

Time spent on reading: 8.27874
Time spent on calculation: 1.49789

3.50 GHz, 4 ядра, 4 потока

PS D:\Uniyar\parallel_prog> mpiexec -n 12 lab1.exe

Dimension of the matrices is 1000x1000

Started data reading

Time spent on reading: 8.26635
Time spent on calculation: 1.49712

PS D:\Uniyar\parallel_prog> mpiexec -n 13 lab1.exe

Dimension of the matrices is 1000x1000

Started data reading

Time spent on reading: 8.25819

Started calculation

Time spent on calculation: 1.46617

PS D:\Uniyar\parallel_prog> mpiexec -n 14 lab1.exe

Dimension of the matrices is 1000x1000

Started data reading

Time spent on reading: 8.26009

Started calculation

Time spent on calculation: 1.44499

PS D:\Uniyar\parallel_prog> mpiexec -n 15 lab1.exe

Dimension of the matrices is 1000×1000

Started data reading

Time spent on reading: 8.54346

Started calculation

Time spent on calculation: 1.513

PS D:\Uniyar\parallel_prog> mpiexec -n 16 lab1.exe

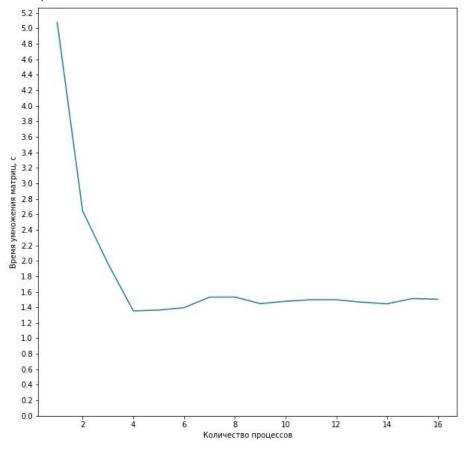
Dimension of the matrices is 1000x1000

Started data reading

Time spent on reading: 8.82191

Started calculation

Time spent on calculation: 1.50407



2. Open MP

AMD Ryzen 3 2200G with Radeon Vega Graphics 3.50 GHz, 4 ядра, 4 потока

