

# High Performance Computing — Homework 2

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1. Location of my git repository.

<https://github.com/tmyangel/HPC17-Homework2.git>

2. Report timings for different values of  $N$  and different numbers of threads.

I set the maximum number of iterations:  $max\_iters = 1000$ .

- Different values of  $N$ : (take number of threads = 4)

$N$	jacobi2D-omp	gs2D-omp
100	0.718627s	0.653675s
500	13.231247s	14.492891s
1000	49.244657s	48.158001s

- Different numbers of threads: (take  $N = 1000$ )

Number of threads	jacobi2D-omp	gs2D-omp
1	118.185533s	121.217677s
2	64.438502s	68.002986s
3	53.286839s	54.481889s
4	49.244657s	48.158001s

3. Specify the machine you run on.

2.7 GHz dual-core Intel Core i5 processor

8 GB 1867 MHz DDR3 memory

It is a Mac laptop.