

Accoriding to my test on more than four different machines, The running time highly depend on the CPU of that machine.

Macbook runs the slowest,

CDF machine runs relatively fast,

Lenovo PC with Intel i7-4710HQ runs the fastest.

The result is: when running with only 1 process, runs the slowest. And, when running with 2-8 processes, the the computer reduces the running time by almost 1 second per process. After that, the running time remains stable.

When processes numbers are relatively small, the computer decrease the running time by use more core to proceed the program. But when processes numbers are relatively high, the computer cannot really process that much processes at a time. So, the running time remains relatively stable.

One interesting observation is, close Macrosoft Word will sharpy decrease the running time XD.

Part of the running result on a "Core i5" cpu of Macbook:

Time span for running with 1 process(es): 69.1003

Time span for running with 2 process(es): 48.5276

Time span for running with 3 process(es): 34.6612

Time span for running with 4 process(es): 35.6737

Time span for running with 5 process(es): 39.1251

Time span for running with 6 process(es): 42.0232

Running result on a CDF machine:

Time span for running with 1 process(es): 17.3204

Time span for running with 2 process(es): 15.3457

Time span for running with 3 process(es): 12.7094

Time span for running with 4 process(es): 11.7743

Time span for running with 5 process(es): 10.7845

Time span for running with 6 process(es): 13.4892