Task 1

joer@joer-VirtualBox:~/os\_lab\_2019/lab4/src/srcLab3$ ./parallel\_min\_maxMF.out --seed=12 --array\_size=300000000 --pnum=5 --timeout=1 by\_files

Timeout!

Process 8065 is free.

Process 8066 is free.

Process 8063 is free.

Process 8064 is free.

Process 8062 is free.

All process were slain.

joer@joer-VirtualBox:~/os\_lab\_2019/lab4/src/srcLab3$ ./parallel\_min\_maxMF.out --seed=12 --array\_size=300000 --pnum=5 --timeout=1 by\_files

Min: 18153

Max: 2147400350

Elapsed time: 9.355000ms

Task 2

int main(){

pid\_t child\_pid= fork();

//If this process is parent.

if (child\_pid > 0){

sleep(60);

}

else{

//It child.

exit(0);

}

return 0;

}

While program run:

ps -e -o pid,ppid,stat,cmd

...

6789 4177 S+ ./zombie.out

6790 6789 Z+ [zombie.out] <defunct>

After:

...

6797 6665 R+ ps -e -o pid,ppid,stat,cmd

The zombie process was slain by daemon “init”.

Task 5

joer@joer-VirtualBox:~/os\_lab\_2019/lab4/src$ ./parallel\_sum.out --threads\_num=5 --seed=12 --array\_size=300000000

Total: 322109737167755486

Elapsed time: 1119.809000ms

joer@joer-VirtualBox:~/os\_lab\_2019/lab4/src$ ./parallel\_sum.out --threads\_num=2 --seed=12 --array\_size=300000000

Total: 322109737167755486

Elapsed time: 1064.954000ms

joer@joer-VirtualBox:~/os\_lab\_2019/lab4/src$ ./parallel\_sum.out --threads\_num=3 --seed=12 --array\_size=300000000

Total: 322109737167755486

Elapsed time: 1065.142000ms

joer@joer-VirtualBox:~/os\_lab\_2019/lab4/src$ ./parallel\_sum.out --threads\_num=1 --seed=12 --array\_size=300000000

Total: 322109737167755486

Elapsed time: 1060.943000ms