

```
300,500,20,30
12,500,9,3
1000,200,3,3
0,100,1,5
0,500,100,3
===== FCFS scheduling =====
PCB : (0,100,1,5)
Finishing time : 401
Turnaround Time : 401
CPU time : 100
I/O time : 301
Waiting time : 0

PCB : (0,500,100,3)
Finishing time : 923
Turnaround Time : 923
CPU time : 500
I/O time : 22
Waiting time : 401

PCB : (12,500,9,3)
Finishing time : 1617
Turnaround Time : 1605
CPU time : 500
I/O time : 194
Waiting time : 911

PCB : (300,500,20,30)
Finishing time : 2902
Turnaround Time : 2602
CPU time : 500
I/O time : 785
Waiting time : 1317

PCB : (1000,200,3,3)
Finishing time : 3311
Turnaround Time : 2311
CPU time : 200
I/O time : 209
Waiting time : 1902

Scheduling 완료된 process의 갯수 : 5
Total Finishing time : 3311
CPU utilization : 800.0
I/O utilization : 200.0
Throughput : 0.15101177891875567
Average turnaround time : 1568.4
Average waiting time : 906.2
```

===== SJF scheduling =====

PCB : (0,100,1,5)

Finishing time : 396

Turnaround Time : 396

CPU time : 100

I/O time : 292

Waiting time : 0

PCB : (12,500,9,3)

Finishing time : 1115

Turnaround Time : 1103

CPU time : 500

I/O time : 218

Waiting time : 384

PCB : (1000,200,3,3)

Finishing time : 1507

Turnaround Time : 507

CPU time : 200

I/O time : 190

Waiting time : 115

PCB : (300,500,20,30)

Finishing time : 2843

Turnaround Time : 2543

CPU time : 500

I/O time : 827

Waiting time : 1207

PCB : (0,500,100,3)

Finishing time : 3368

Turnaround Time : 3368

CPU time : 500

I/O time : 23

Waiting time : 2843

Scheduling 완료된 process의 갯수 : 5

Total Fininshing time : 3368

CPU utilization : 300.0

I/O utilization : 200.0

Throughput : 0.14845605700712589

Average turnaround time : 1583.4

Average waiting time : 909.8

PS C:\Users\Home>