

Nama : Kurniawan Andika W.

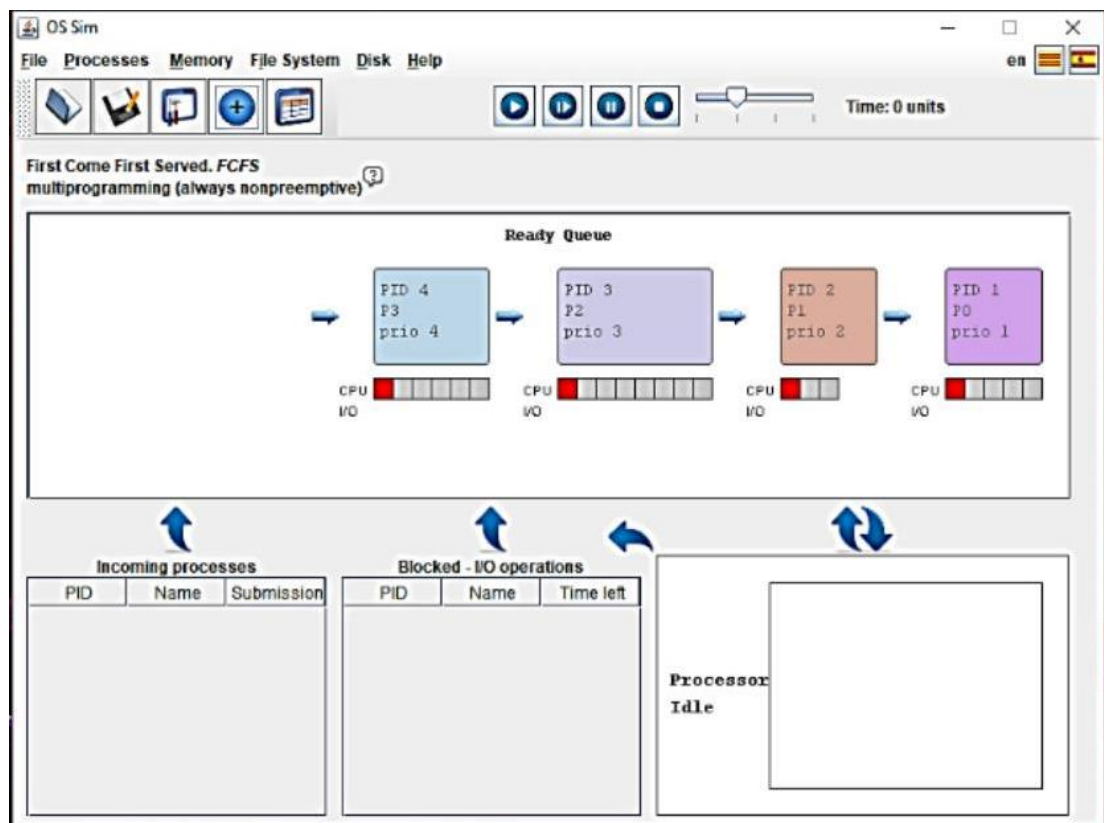
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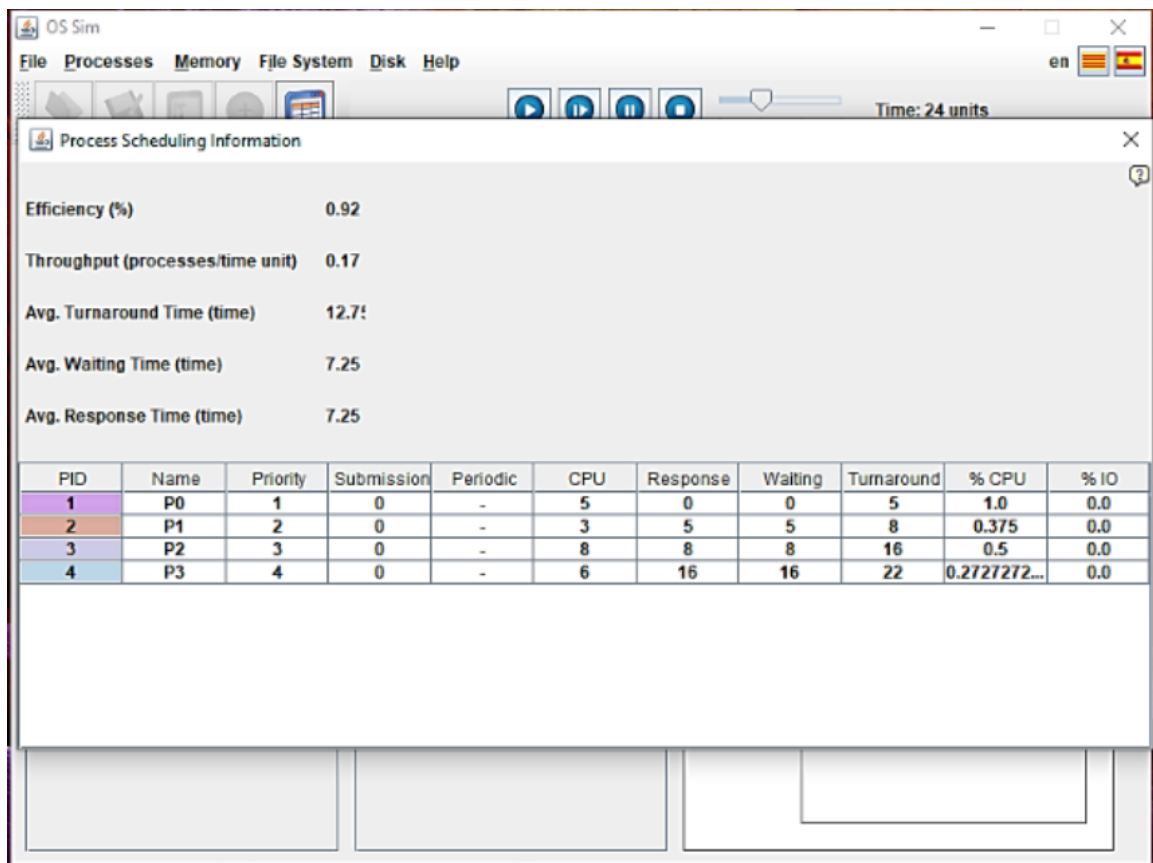
## Praktikum Sistem Operasi

### Modul 11

#### 1.FCFS

Process	ArrivalTime	BurstTime	ServiceTime
P0	0	5	0
P1	1	3	5
P2	2	8	8
P3	3	6	16



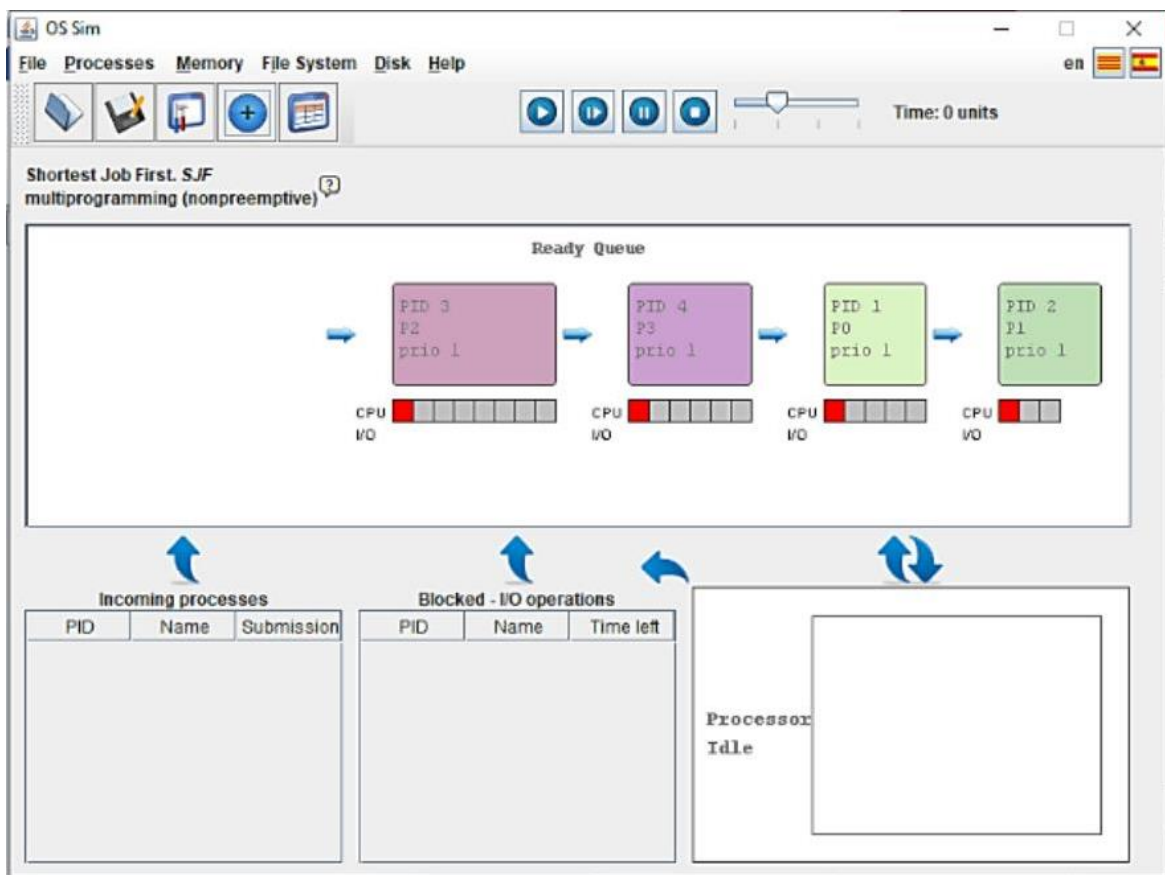


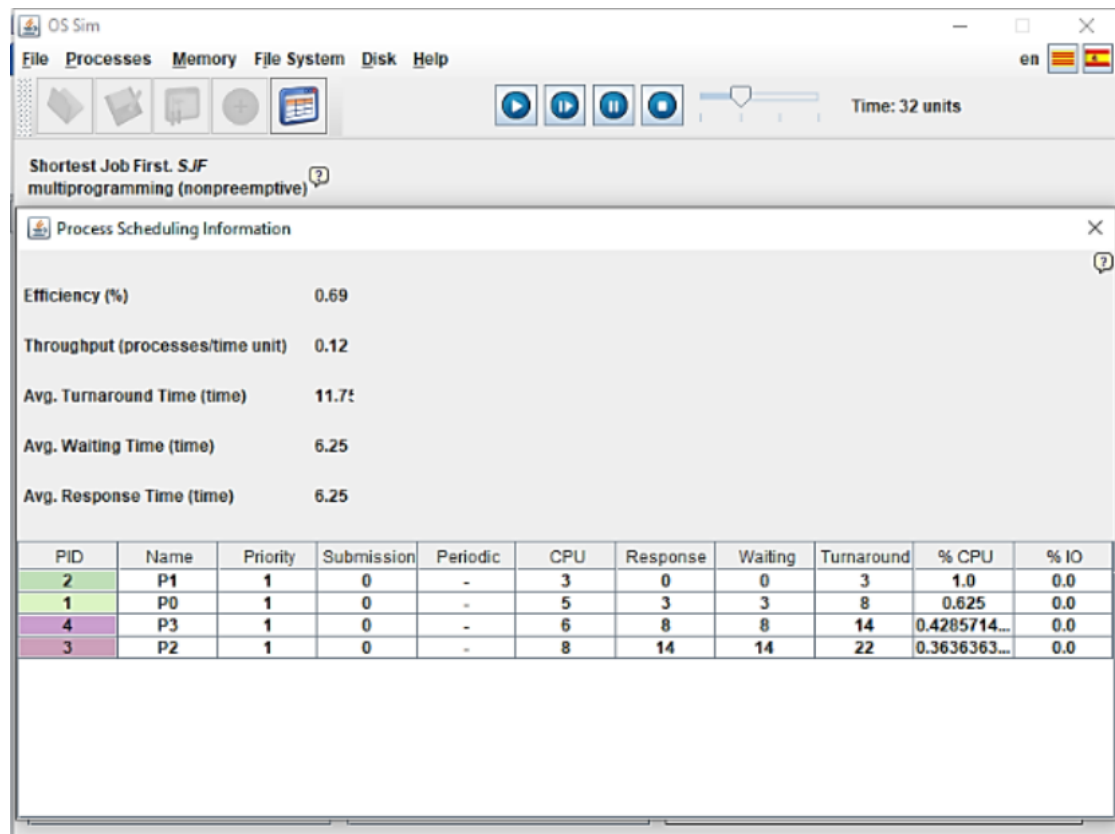
Process	WaitTime:ServiceTime–ArrivalTime
P0	0
P1	5
P2	8
P3	16
Avwaittime	7.25

## 2.SJF

Process	ArrivalTime	BurstTime	ServiceTime
P0	0	5	0
P1	1	3	5
P2	2	8	8
P3	3	6	16

Non-preemptive



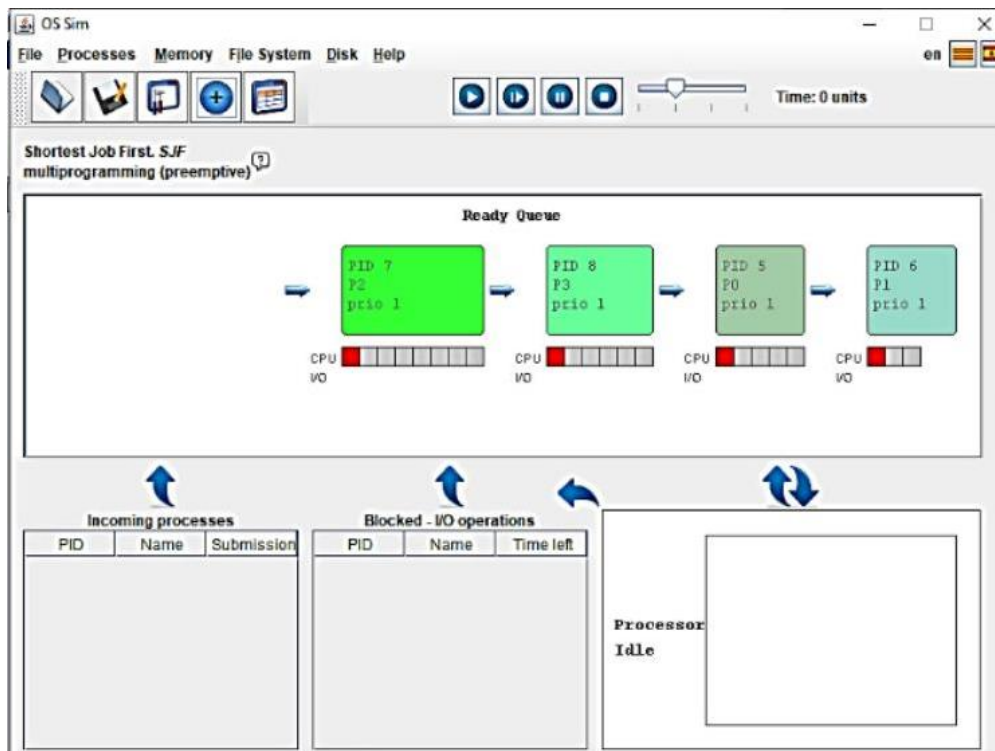


Process	WaitTime:ServiceTime–ArrivalTime
P0	3
P1	0
P2	14
P3	8
Avwaittime	6.25

### Preemptive

Process	ArrivalTime	BurstTime	ServiceTime
P0	0	5	0
P1	1	3	5
P2	2	8	8

P3	3	6	16
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OS Sim

File Processes Memory File System Disk Help

en

Time: 66 units

Shortest Job First, SJF  
multiprogramming (preemptive)

Process Scheduling Information

Efficiency (%) 0.33

Throughput (processes/time unit) 0.06

Avg. Turnaround Time (time) 11.75

Avg. Waiting Time (time) 6.25

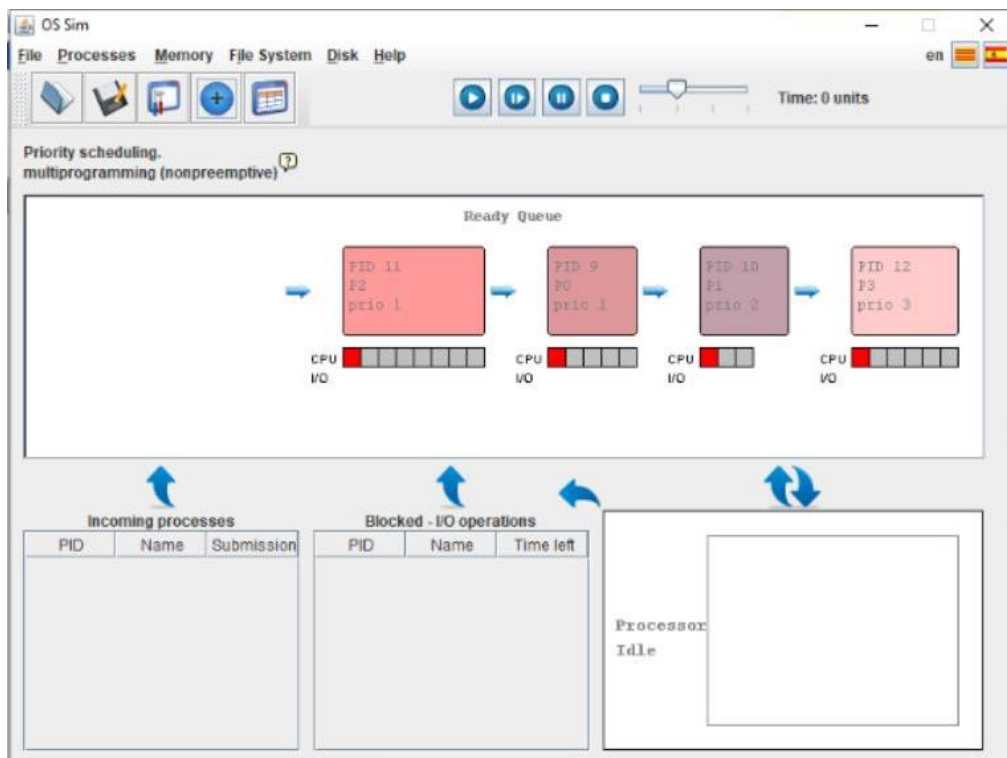
Avg. Response Time (time) 6.25

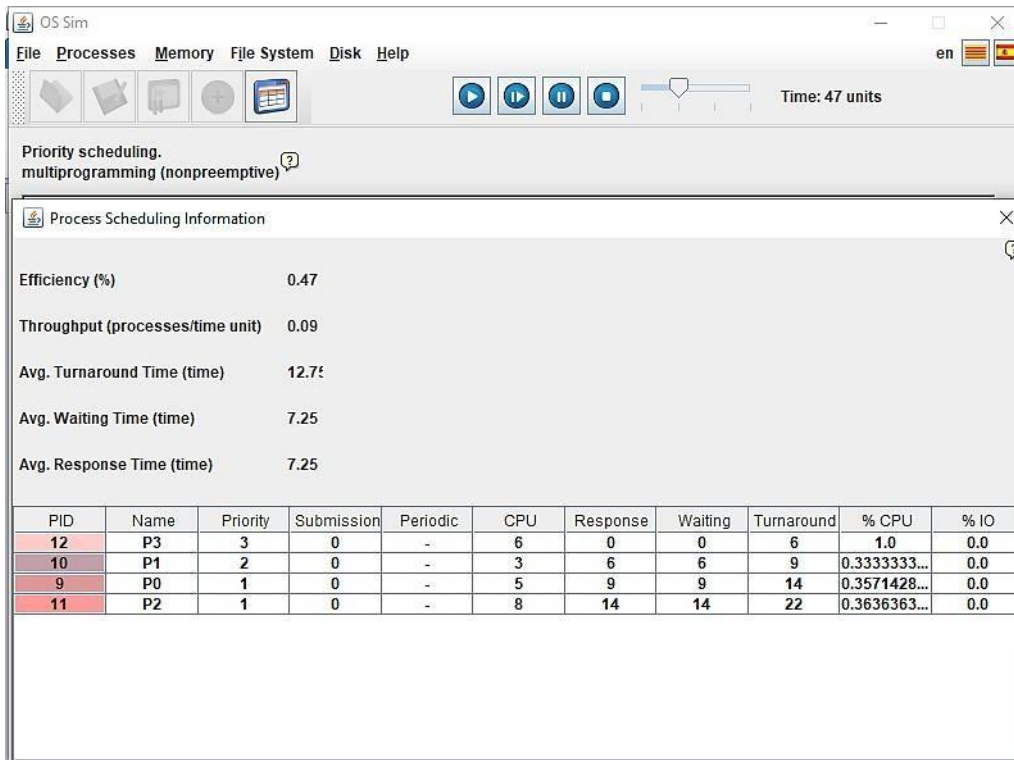
PID	Name	Priority	Submission	Periodic	CPU	Response	Waiting	Turnaround	% CPU	% I/O
6	P1	1	0	-	3	0	0	3	1.0	0.0
5	P0	1	0	-	5	3	3	8	0.625	0.0
8	P3	1	0	-	6	8	8	14	0.4285714...	0.0
7	P2	1	0	-	8	14	14	22	0.3636363...	0.0

Process	WaitTime:ServiceTime–ArrivalTime
P0	3
P1	0
P2	14
P3	8
Avwaittime	6.25

### 3.Priority

Process	ArrivalTime	BurstTime	Priority	ServiceTime
P0	0	5	1	0
P1	1	3	2	11
P2	2	8	1	14
P3	3	6	3	5

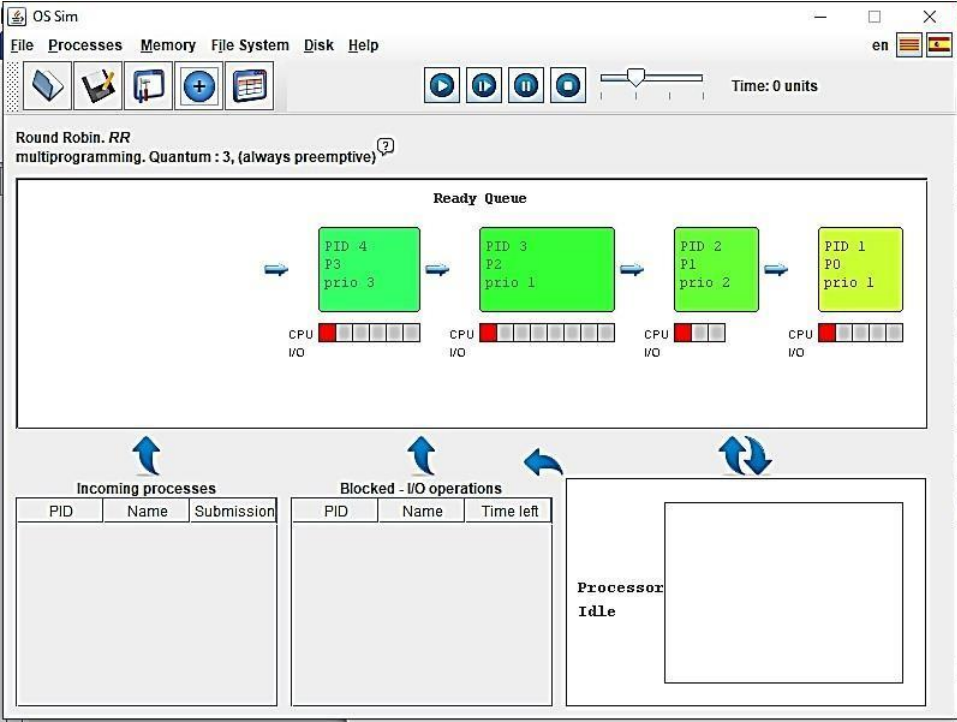




Process	WaitTime:ServiceTime–ArrivalTime
P0	9
P1	6
P2	14
P3	0
Avwaittime	7.25

#### 4.RoundRobin(quantumtime=3)

Process	ArrivalTime	BurstTime	Priority	ServiceTime
P0	0	5	1	0
P1	1	3	2	11
P2	2	8	1	14
P3	3	6	3	5



OS Sim

File Processes Memory File System Disk Help

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Time: 31 units

Round Robin. RR  
multiprogramming. Quantum : 3, (always preemptive)

Process Scheduling Information

Efficiency (%) 0.71

Throughput (processes/time unit) 0.13

Avg. Turnaround Time (time) 15.50

Avg. Waiting Time (time) 10.00

Avg. Response Time (time) 4.50

PID	Name	Priority	Submission	Periodic	CPU	Response	Waiting	Turnaround	% CPU	% IO
2	P1	2	0	-	3	3	3	6	0.5	0.0
1	P0	1	0	-	5	0	9	14	0.3571428...	0.0
4	P3	3	0	-	6	9	14	20	0.3	0.0
3	P2	1	0	-	8	6	14	22	0.3636363...	0.0



Process	WaitTime:ServiceTime–ArrivalTime
P0	9
P1	3
P2	14
P3	14
Avwaittime	10