

## Modul 11

NIM : L200180132

Nama : Rohana Murniati Furshotun

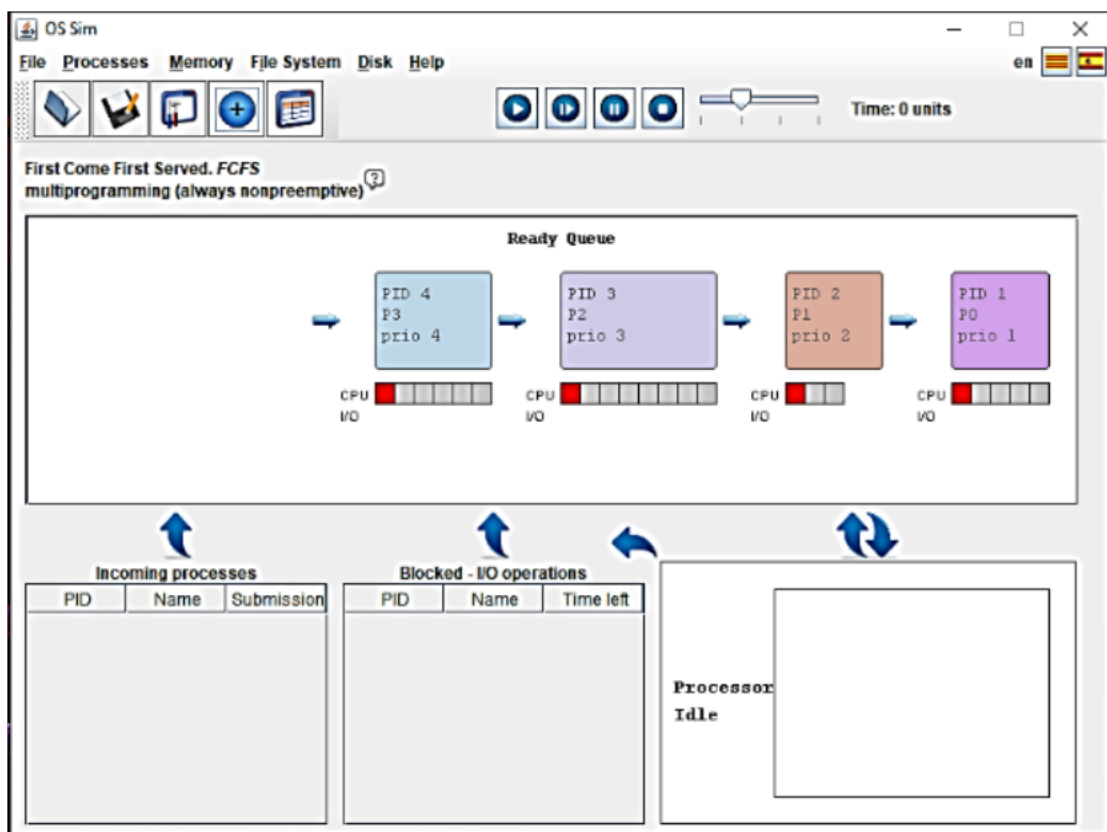
Nama Asisten : Salsa Sasmita M

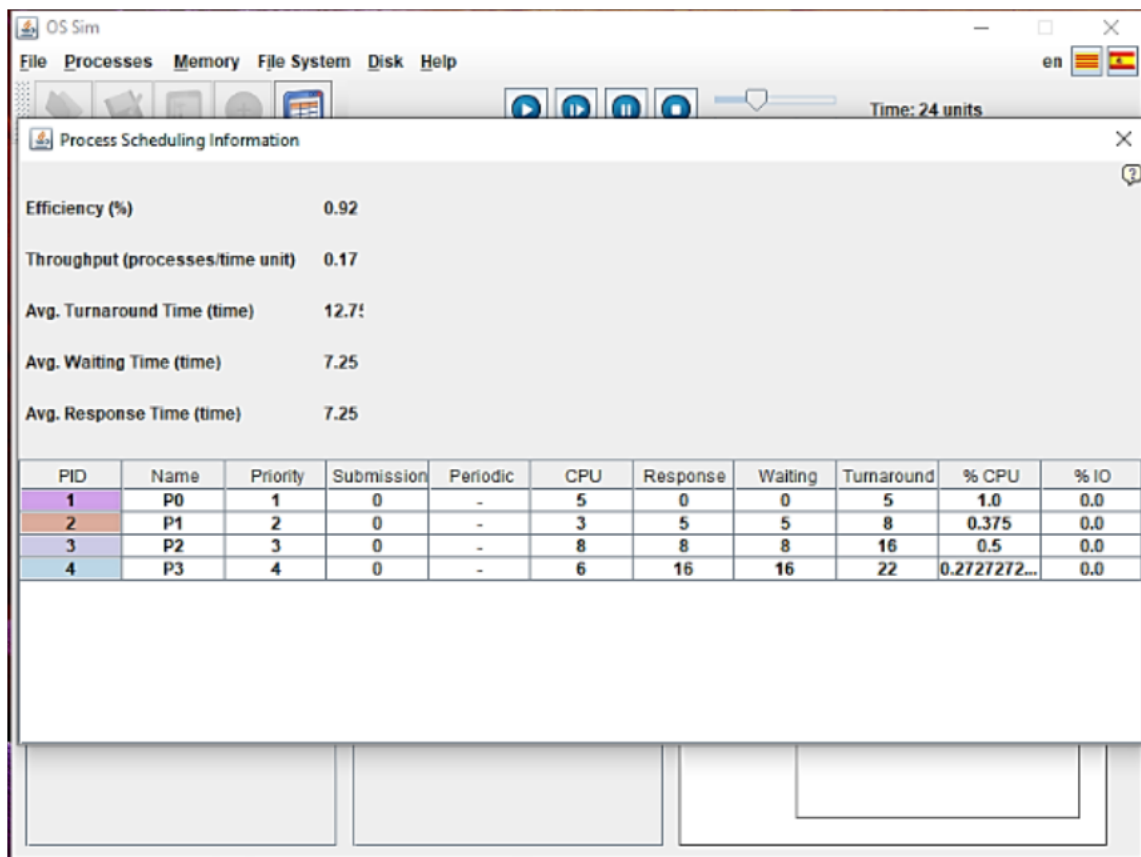
Nur Aini A

Tanggal Praktikum : Desember 2019

### 1. FCFS

Process	Arrival Time	Burst Time	Service Time
P0	0	5	0
P1	1	3	5
P2	2	8	8
P3	3	6	16



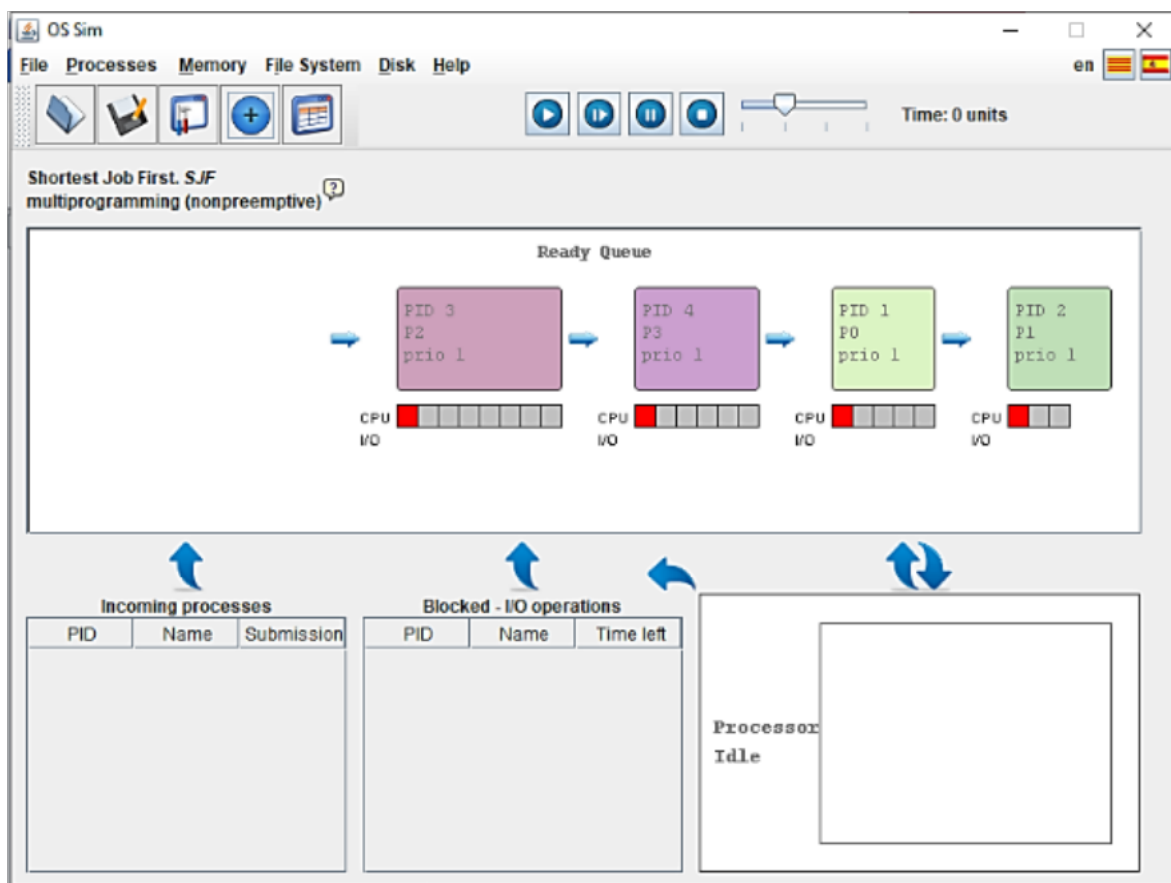


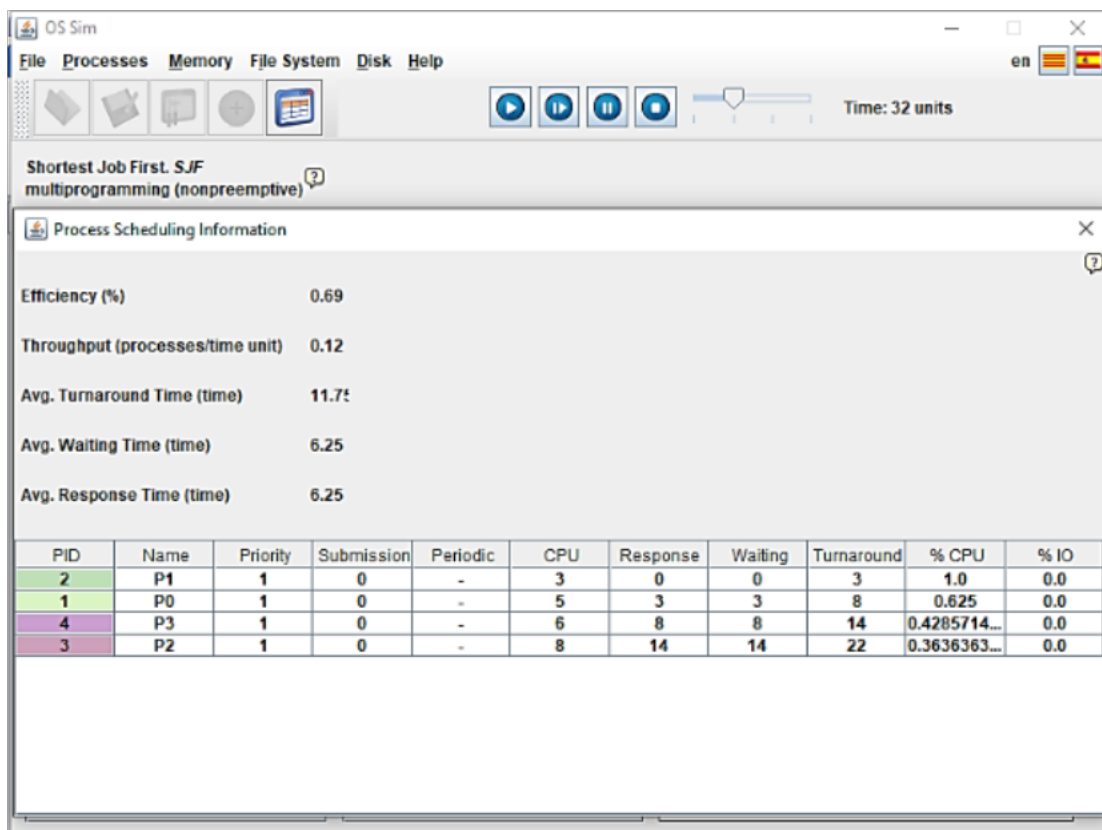
Process	Wait Time : Service Time – Arrival Time
P0	0
P1	5
P2	8
P3	16
Av wait time	7.25

## 2. SJF

Process	Arrival Time	Burst Time	Service Time
P0	0	5	0
P1	1	3	5
P2	2	8	8
P3	3	6	16

*Non-preemptive*



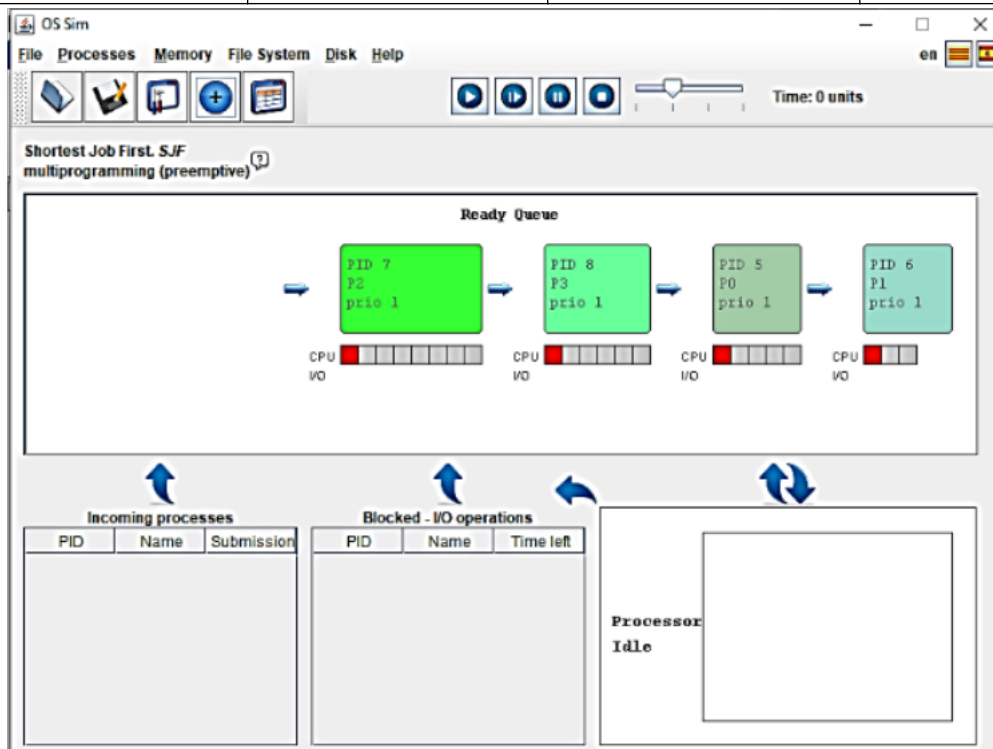


Process	Wait Time : Service Time – Arrival Time
P0	3
P1	0
P2	14
P3	8
Av wait time	6.25

*Preemptive*

Process	Arrival Time	Burst Time	Service Time
P0	0	5	0
P1	1	3	5
P2	2	8	8

P3	3	6	16
----	---	---	----



OS Sim

File Processes Memory File System Disk Help

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

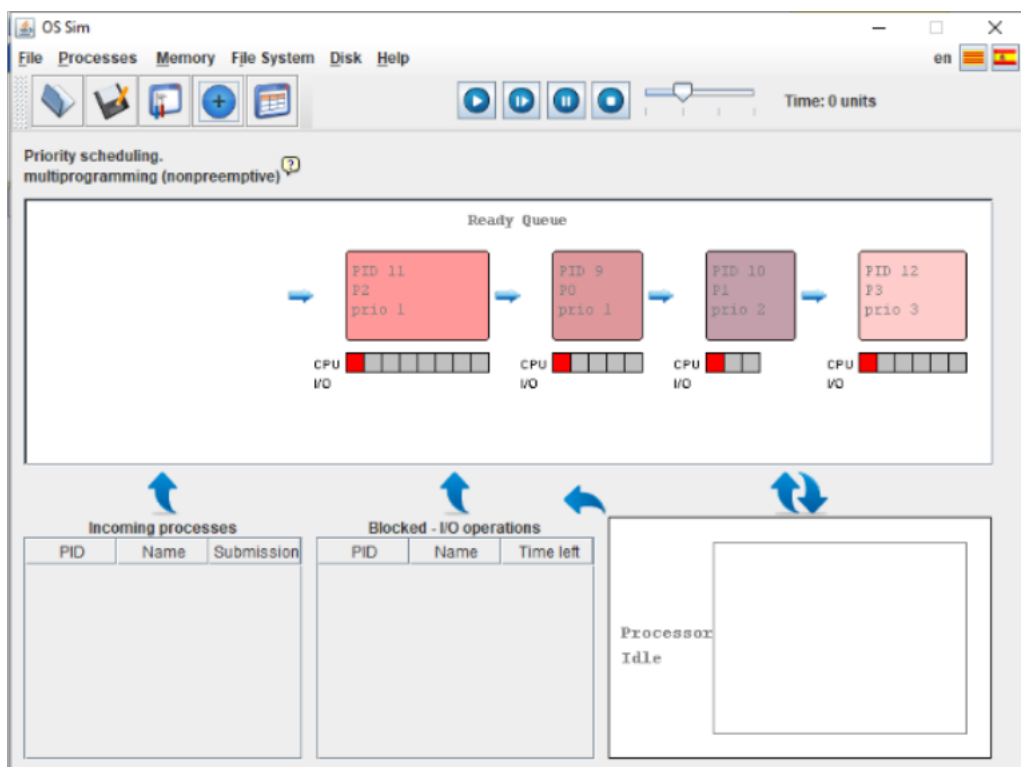
Avg. Response Time (time) 6.25

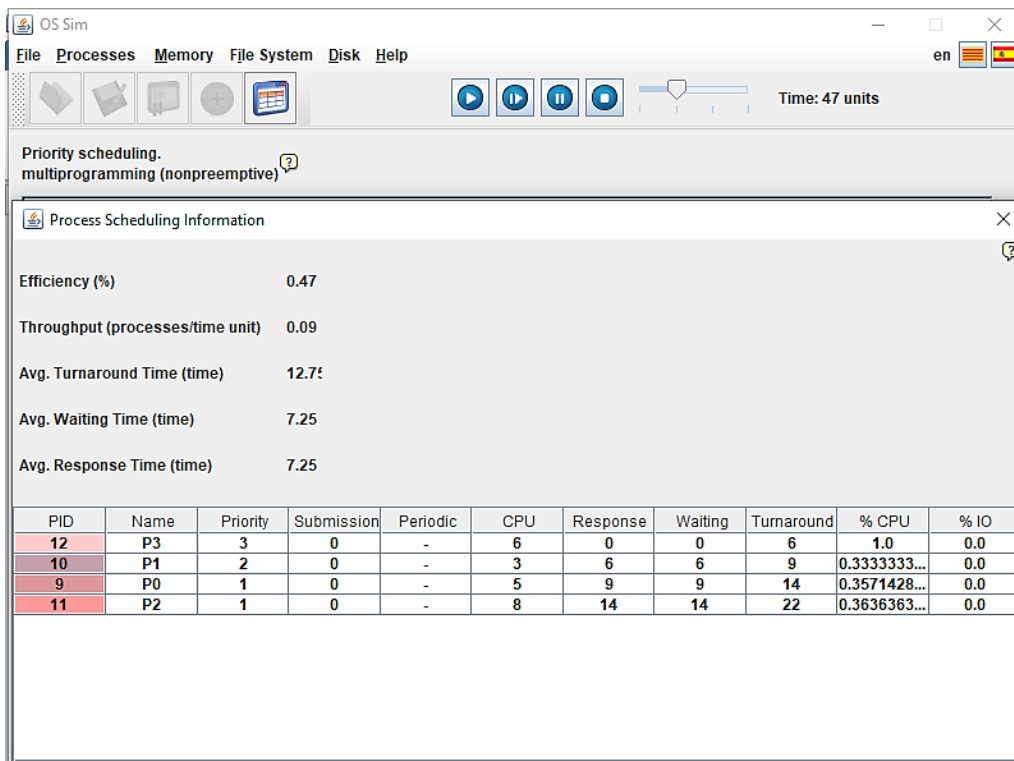
PID	Name	Priority	Submission	Periodic	CPU	Response	Waiting	Turnaround	% CPU	% IO
6	P1	1	0	-	3	0	0	3	1.0	0.0
5	P0	1	0	-	5	3	3	8	0.625	0.0
8	P3	1	0	-	6	8	8	14	0.4285714...	0.0
7	P2	1	0	-	8	14	14	22	0.3636363...	0.0

Process	Wait Time : Service Time – Arrival Time
P0	3
P1	0
P2	14
P3	8
Av wait time	6.25

### 3. Priority

Process	Arrival Time	Burst Time	Priority	Service Time
P0	0	5	1	0
P1	1	3	2	11
P2	2	8	1	14
P3	3	6	3	5

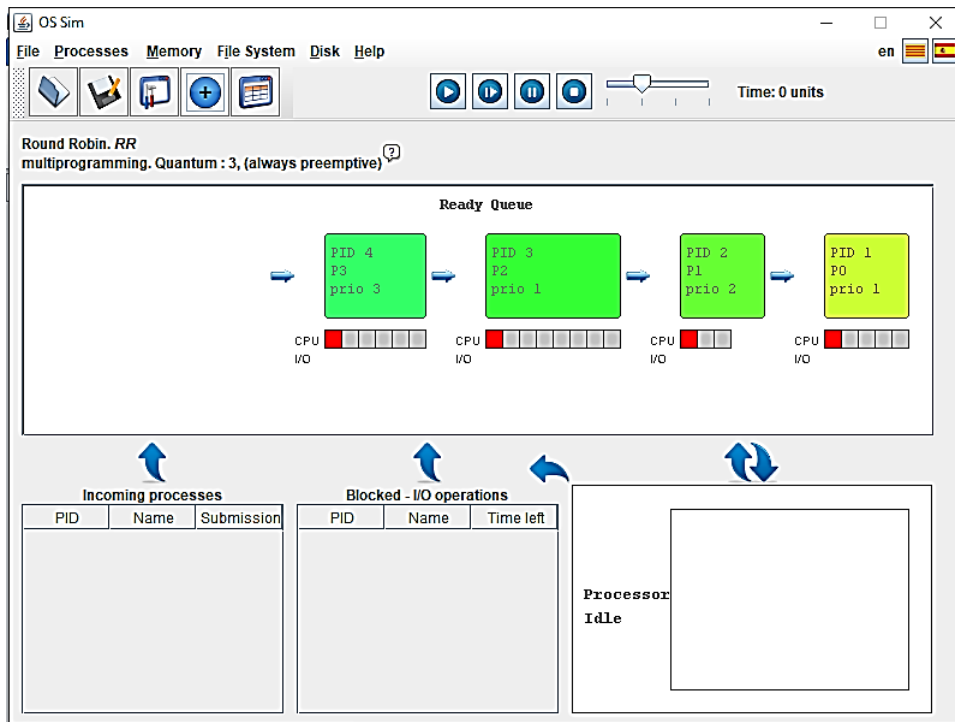




Process	Wait Time : Service Time – Arrival Time
P0	9
P1	6
P2	14
P3	0
Av wait time	7.25

#### 4. Round Robin ( quantum time = 3)

Process	Arrival Time	Burst Time	Priority	Service Time
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

en

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	Wait Time : Service Time – Arrival Time
P0	9
P1	3
P2	14
P3	14
Av wait time	10