

Nama : Anisa Ghoyatul Firdaus

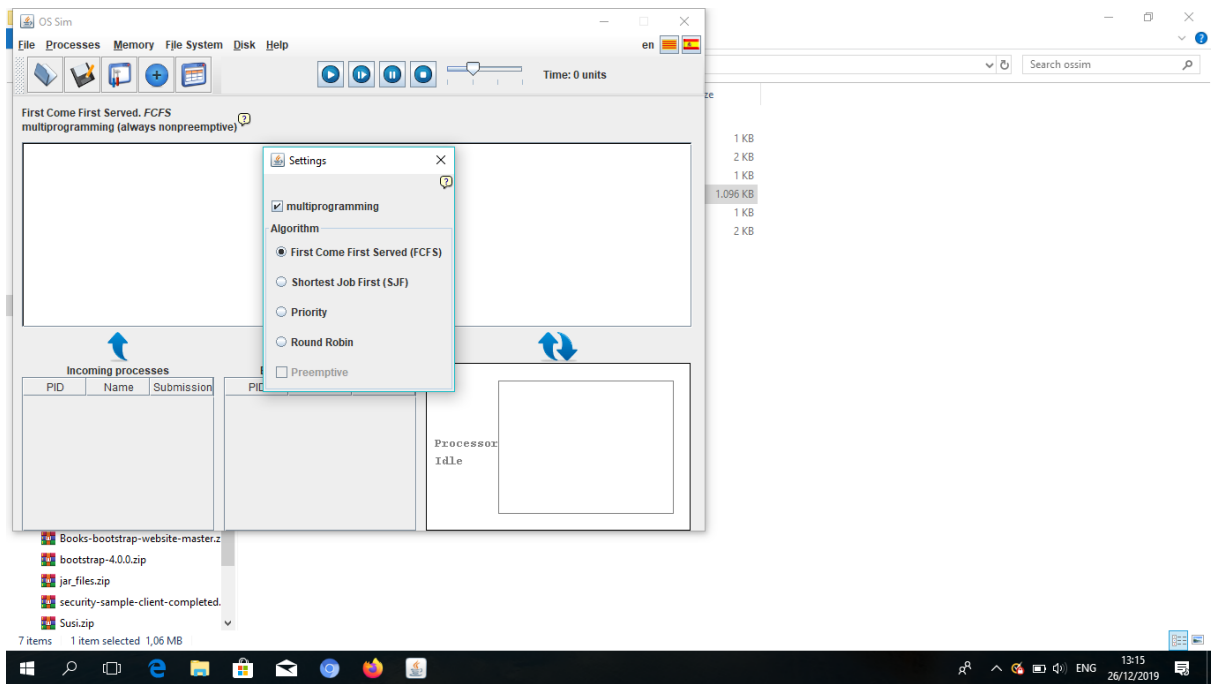
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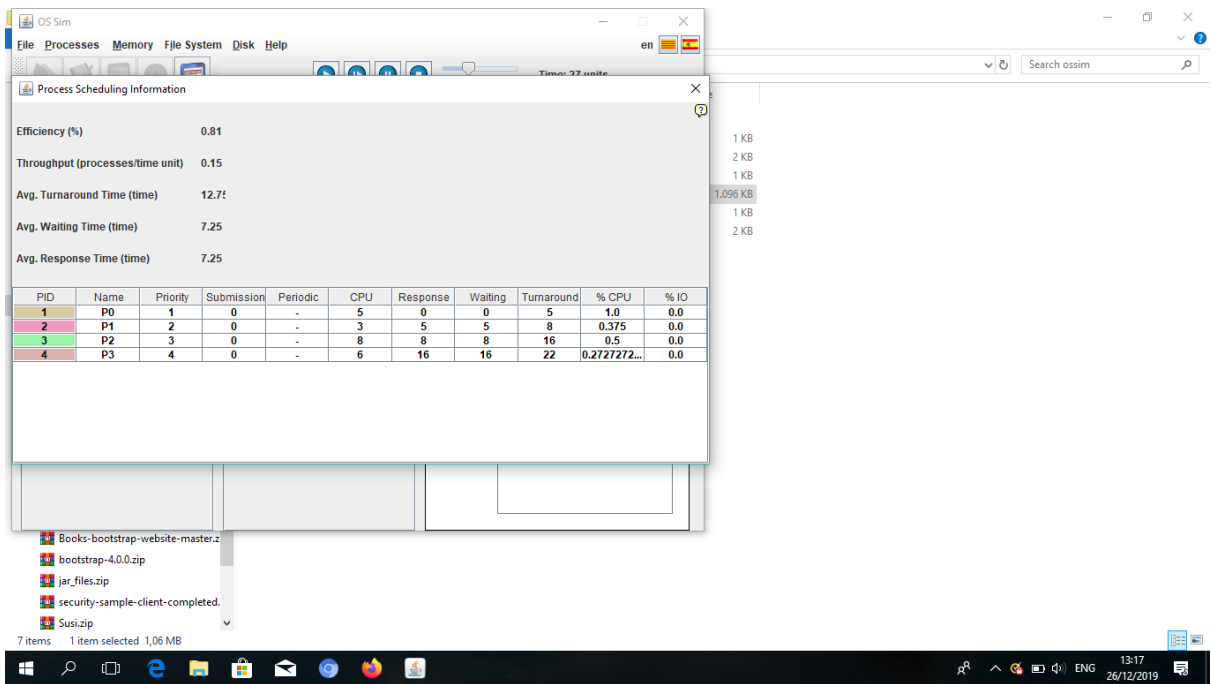
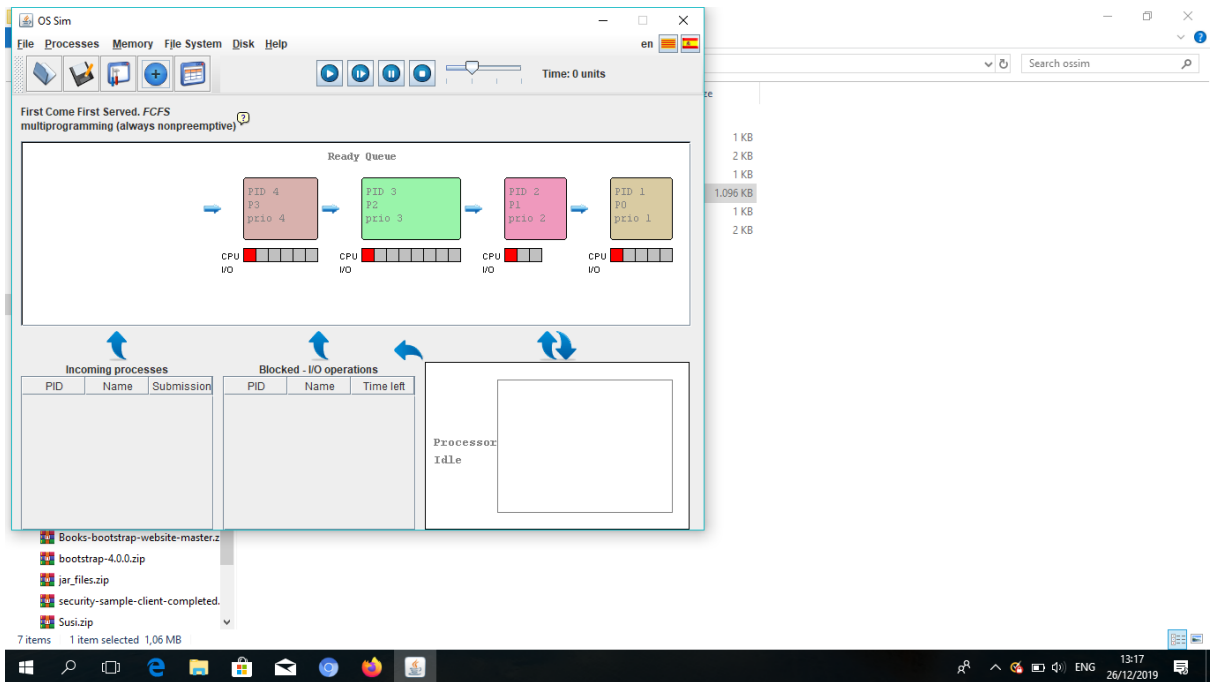
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1. FCFS

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





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

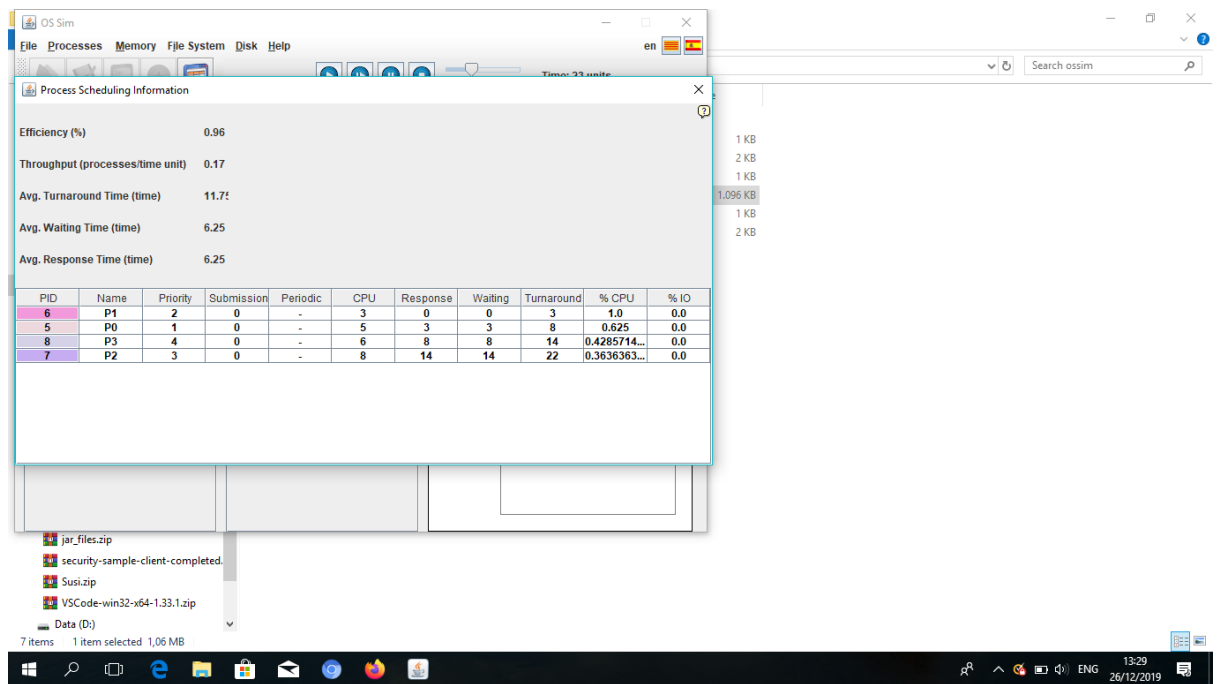
2. SJFS

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

a. Preemptive

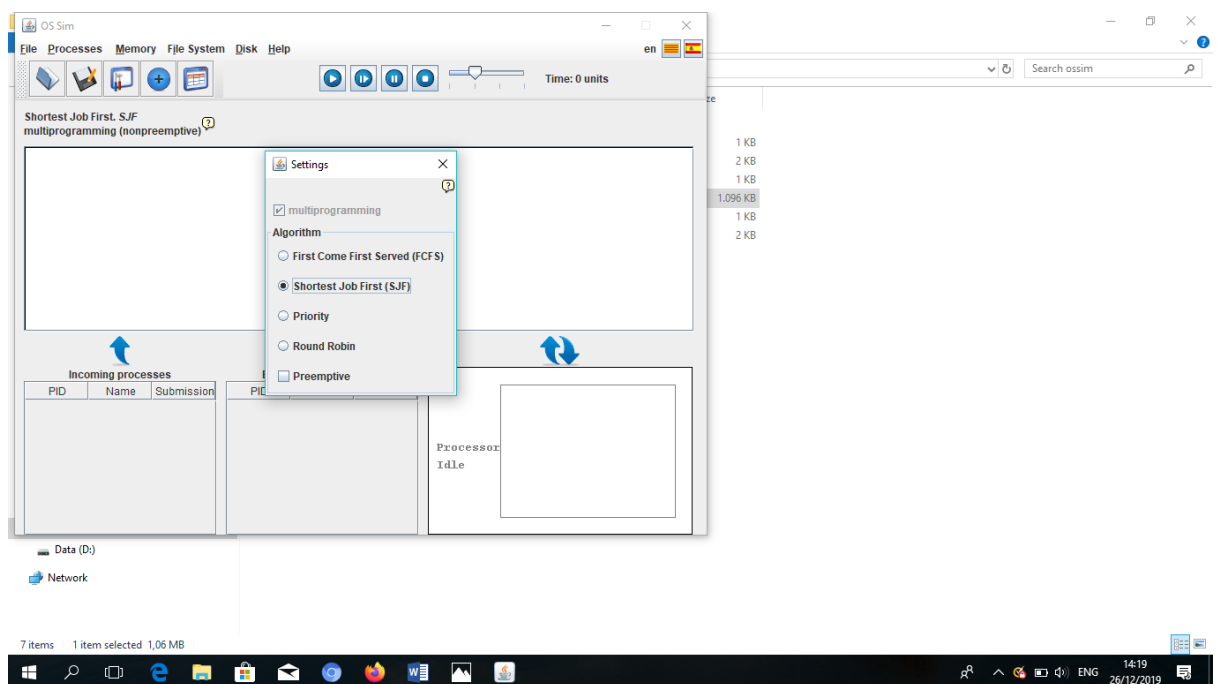
The first screenshot shows the OS Sim interface with the 'Settings' dialog box open. The 'Algorithm' section is set to 'Shortest Job First (SJF)' and 'Preemptive' is checked. The 'Incoming processes' table is empty, and the 'Processor' is idle.

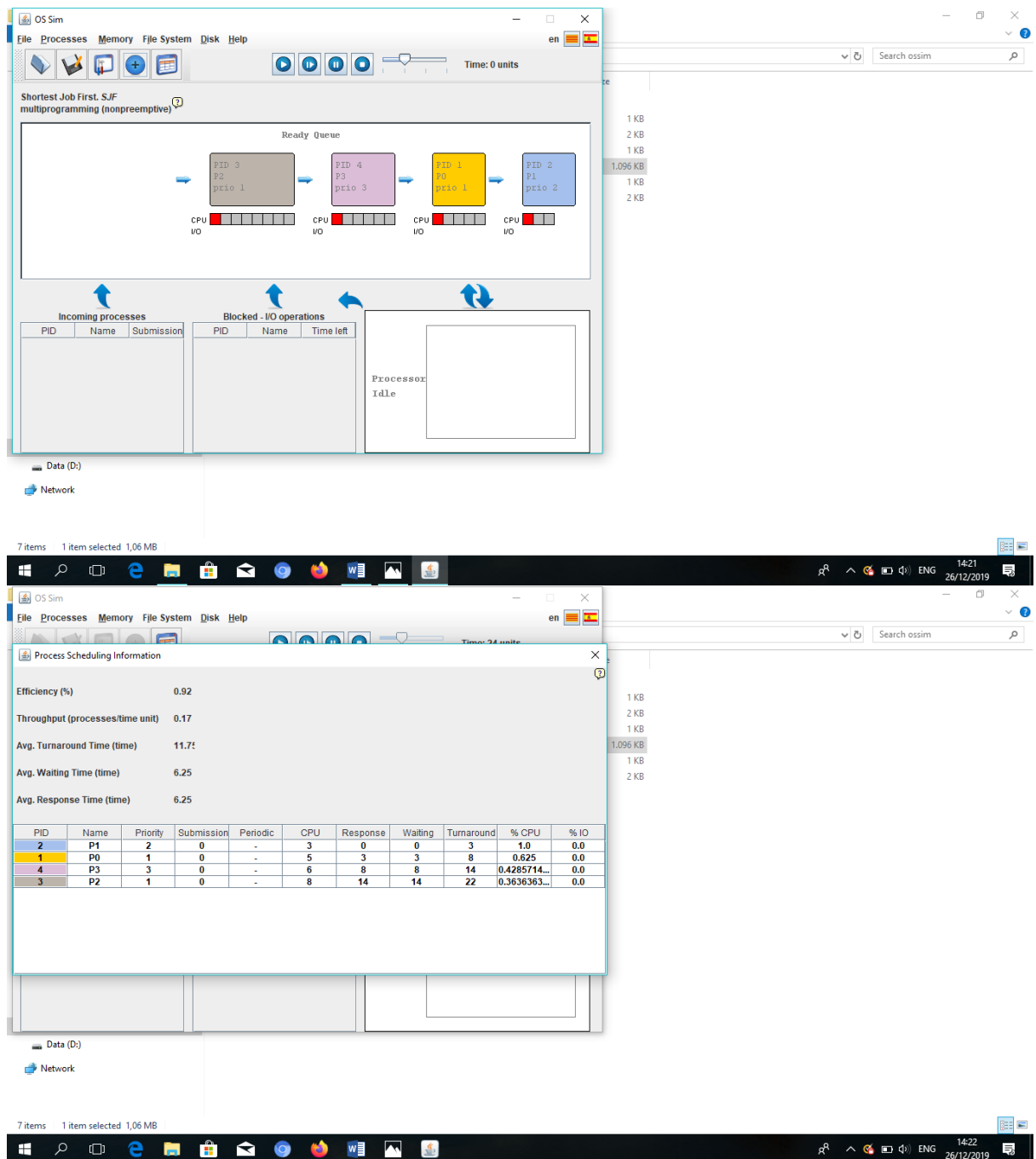
The second screenshot shows the OS Sim interface after the simulation has started. The 'Ready Queue' contains four processes: P2 (PID 7, prio 3), P3 (PID 8, prio 4), P0 (PID 5, prio 1), and P1 (PID 6, prio 2). The 'Incoming processes' table is empty, and the 'Blocked - I/O operations' table is also empty. The 'Processor' is idle.



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

b. Non preemptive





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

3. Priority Scheduling

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

The top screenshot shows the OS Sim application with the 'Settings' dialog open. The 'Algorithm' section has 'Priority' selected. The 'Incoming processes' table is empty. The 'Processor' is 'Idle'.

The bottom screenshot shows the OS Sim application with the 'Ready Queue' populated. The queue contains four processes: P0 (PID 1, prio 1), P1 (PID 2, prio 2), P2 (PID 3, prio 1), and P3 (PID 4, prio 3). The 'Incoming processes' table is empty. The 'Blocked - I/O operations' table is empty. The 'Processor' is 'Idle'.

OS Sim

File Processes Memory File System Disk Help

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Time: 26 units

Search ossim

Process Scheduling Information

Efficiency (%) 0.88

Throughput (processes/time unit) 0.16

Avg. Turnaround Time (time) 12.75

Avg. Waiting Time (time) 7.25

Avg. Response Time (time) 7.25

PID	Name	Priority	Submission	Periodic	CPU	Response	Waiting	Turnaround	% CPU	% IO
4	P3	3	0	-	6	0	0	6	1.0	0.0
2	P1	2	0	-	3	6	6	9	0.3333333...	0.0
1	P0	1	0	-	5	9	9	14	0.3571428...	0.0
3	P2	1	0	-	8	14	14	22	0.3636363...	0.0

jar_files.zip

security-sample-client-completed.

Susi.zip

VSCode-win32-x64-1.33.1.zip

Data (D:)

7 items 1 item selected 1.06 MB

13-37 26/12/2019

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

4. Rown Robbin (Quantum = 3)

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

The top screenshot shows the OS Sim application window. The title bar reads "OS Sim". The menu bar includes "File", "Processes", "Memory", "File System", "Disk", and "Help". The toolbar contains icons for file operations and a "Time: 0 units" display. The main window title is "Round Robin, RR multiprogramming, Quantum : 3, (always preemptive)". A "Settings" dialog box is open, showing "multiprogramming" checked, "Algorithm" set to "Round Robin" with a quantum of 3, and "Preemptive" checked. The "Incoming processes" table is empty. The "Processor" status is "Idle".

The bottom screenshot shows the same application after some time has passed. The "Ready Queue" now contains four processes: P0 (PID 4, Prio 3), P1 (PID 3, Prio 1), P2 (PID 2, Prio 2), and P3 (PID 1, Prio 3). Each process has a red bar representing its quantum, which is 3 units long. The "Incoming processes" table is still empty. The "Blocked - I/O operations" table is also empty. The "Processor" status remains "Idle".

OS Sim

File Processes Memory File System Disk Help

Process Scheduling Information

Efficiency (%) 0.92

Throughput (processes/time unit) 0.17

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

7 items 1 item selected 1.06 MB

13:40 26/12/2019

Process	Wait time : Service Time – Arrival Time
P0	9
P1	3
P2	14
P3	14
Av wait time	10.0