

**PRAKTIKUM SISTEM OPERASI**  
**MODUL 11**



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**NIM : L200200101**

**PROGRAM STUDI**  
**INFORMATIKA**

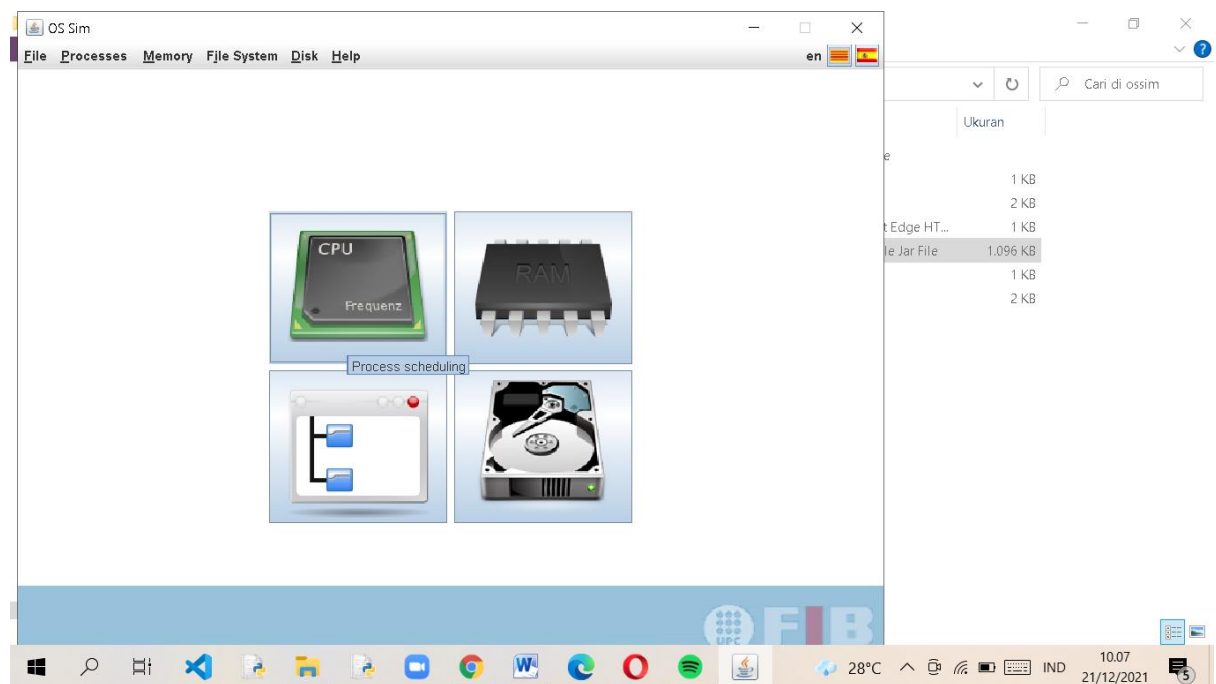
**FAKULTAS KOMUNIKASI DAN INFORMATIKA**  
**UNIVERSITAS MUHAMMADIYAH SURAKARTA**  
**TAHUN 2021/2022**

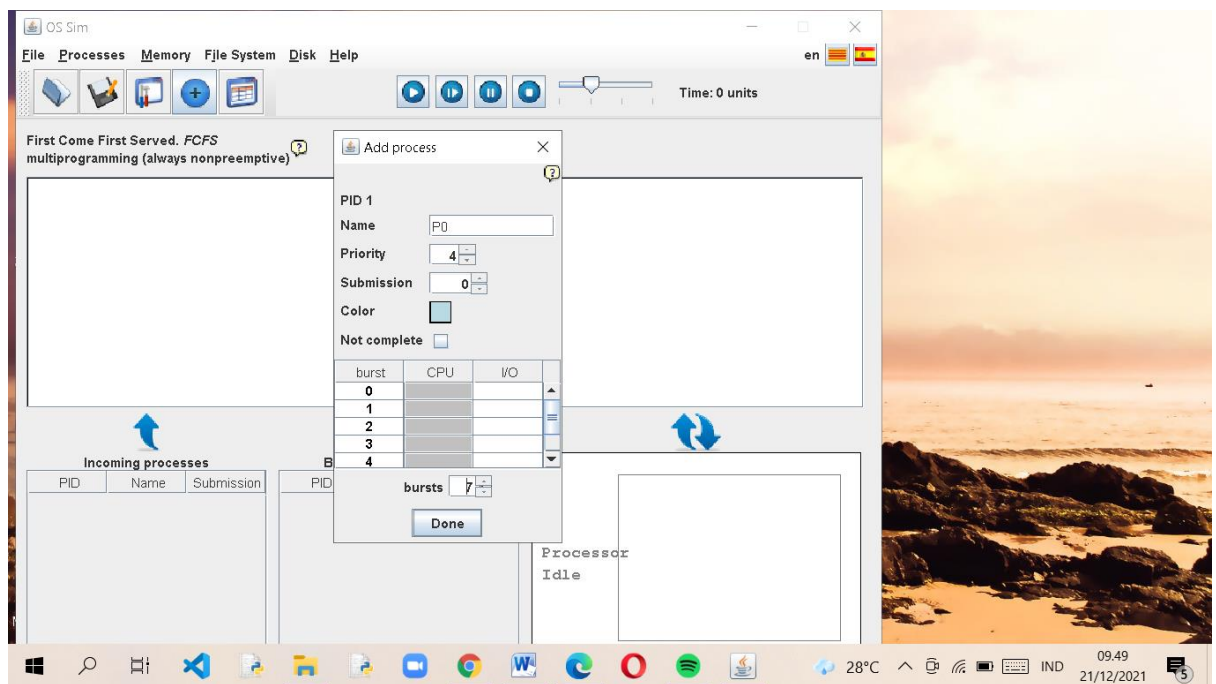
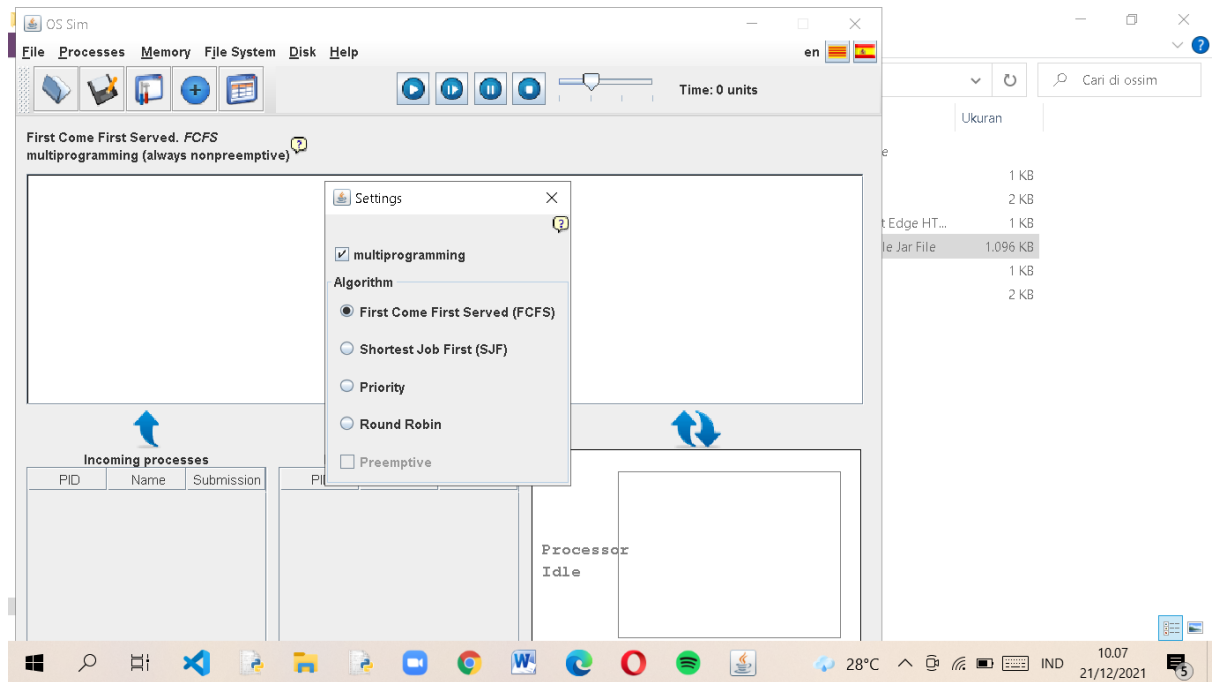
- Kegiatan 1. First-Come, First-Served (FCFS)

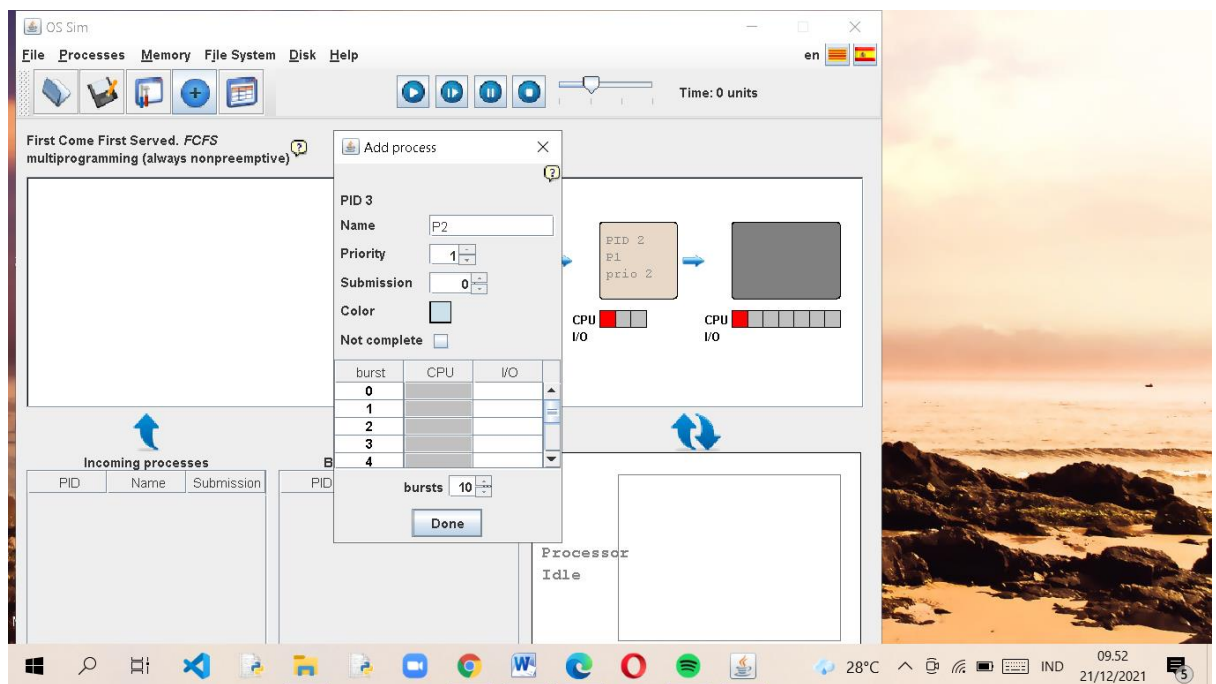
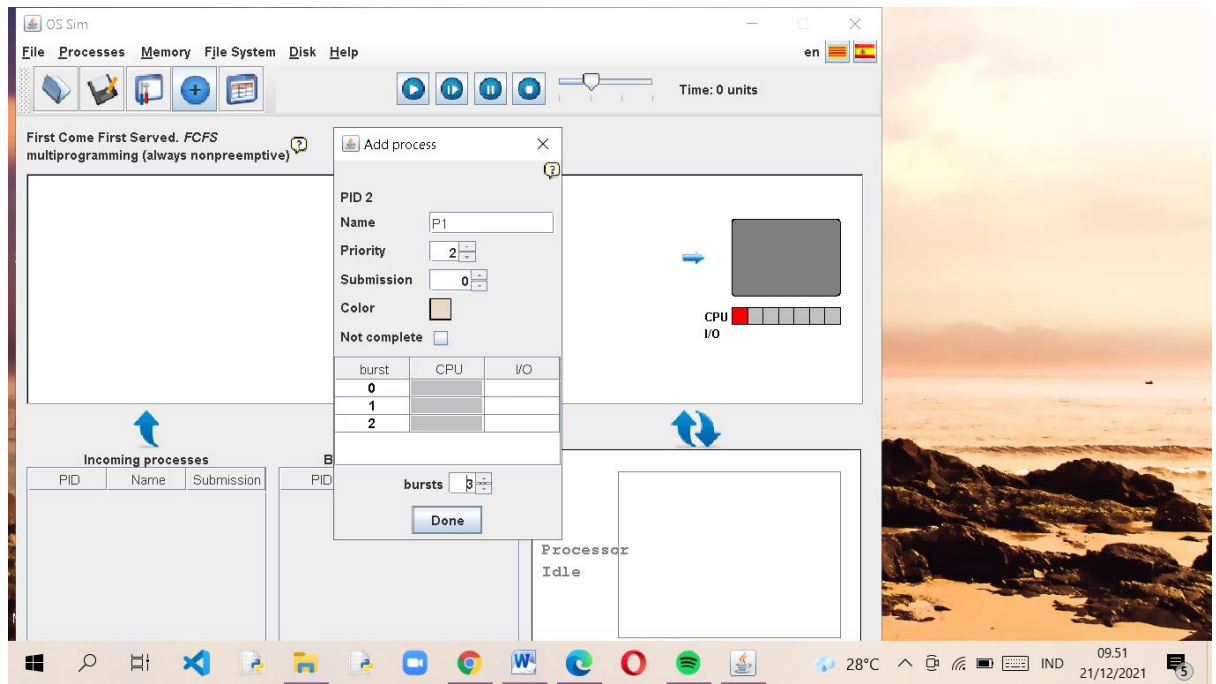
1. Bukalah program OSSim, selanjutnya pilih menu processes -> process scheduling.
2. Selanjutnya pilihlah setting dan pilih algoritma First-Come, First-Served (FCFS).
3. Tabel

Proses	Arrival time	Burst time	Service time	priority
P0	0	7	0	4
P1	1	3	7	2
P2	2	10	10	1
P3	3	2	20	3

4. Screenshot







OS Sim

File Processes Memory File System Disk Help

en

Time: 0 units

First Come First Served. FCFS  
multiprogramming (always nonpreemptive)

Add process

PID 4  
Name P3  
Priority 3  
Submission 0  
Color ☐  
Not complete ☐

burst CPU I/O  
0  
1

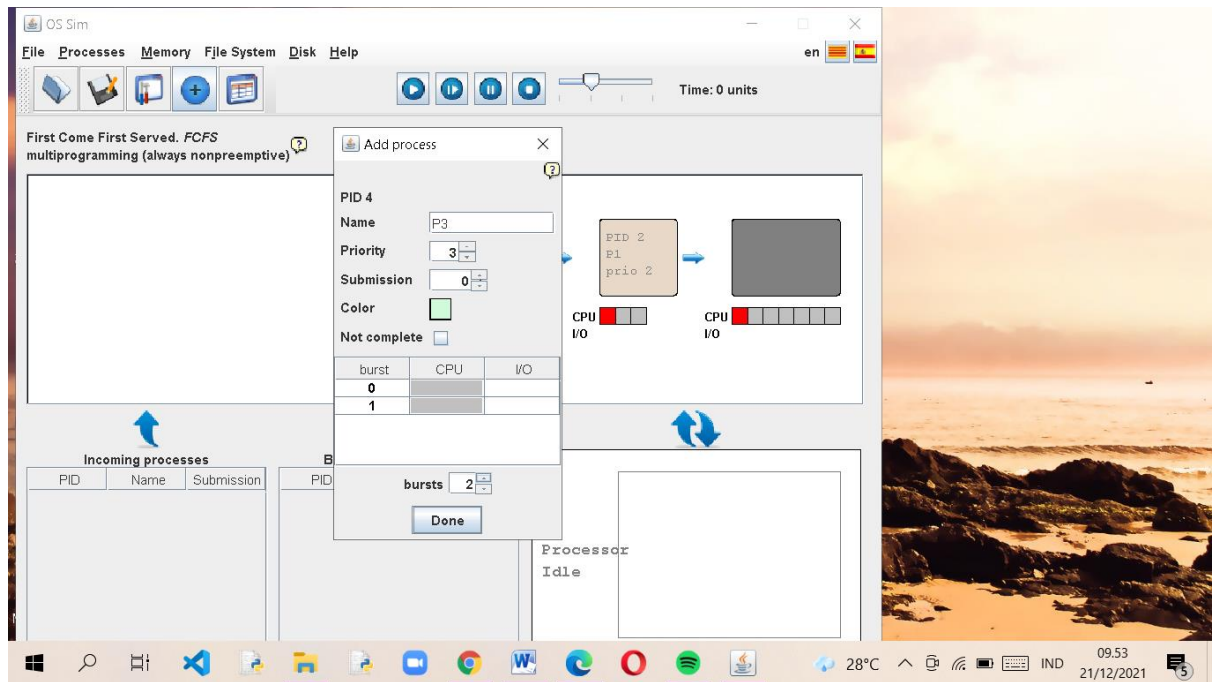
bursts 2

Done

Incoming processes

PID	Name	Submission
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Processor  
Idle



OS Sim

File Processes Memory File System Disk Help

en

Time: 0 units

First Come First Served. FCFS  
multiprogramming (always nonpreemptive)

Ready Queue

PID 4  
P3  
prio 3

PID 3  
P2  
prio 1

PID 2  
P1  
prio 2

CPU I/O

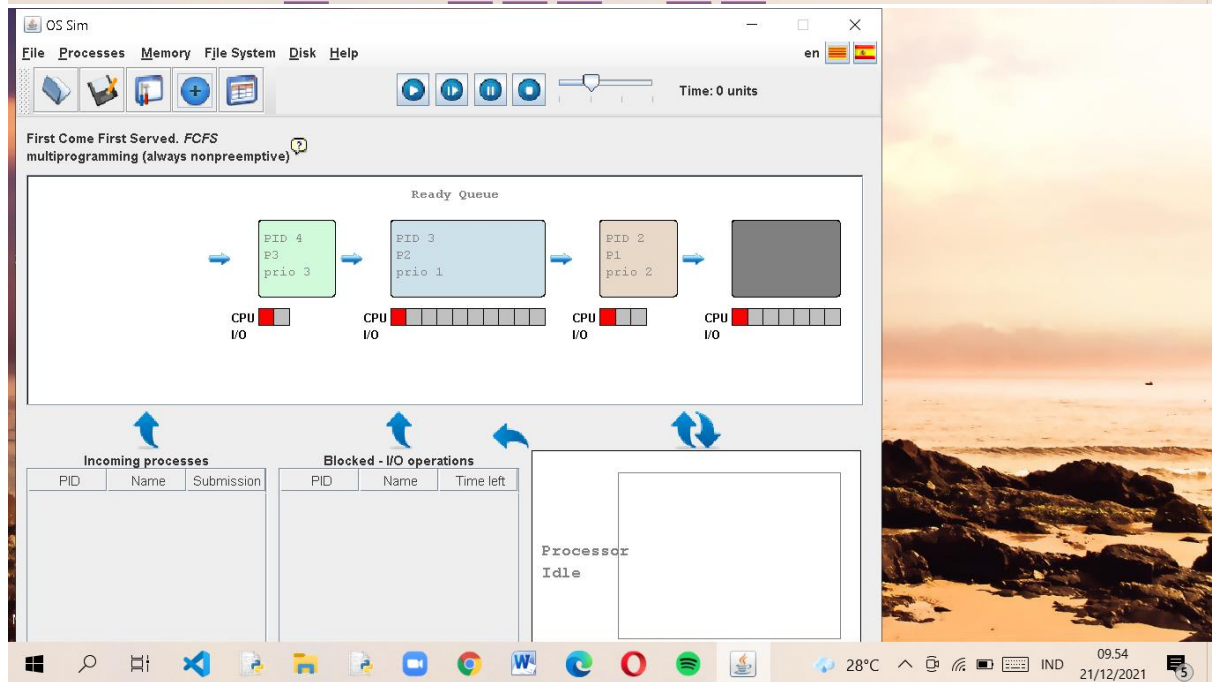
Incoming processes

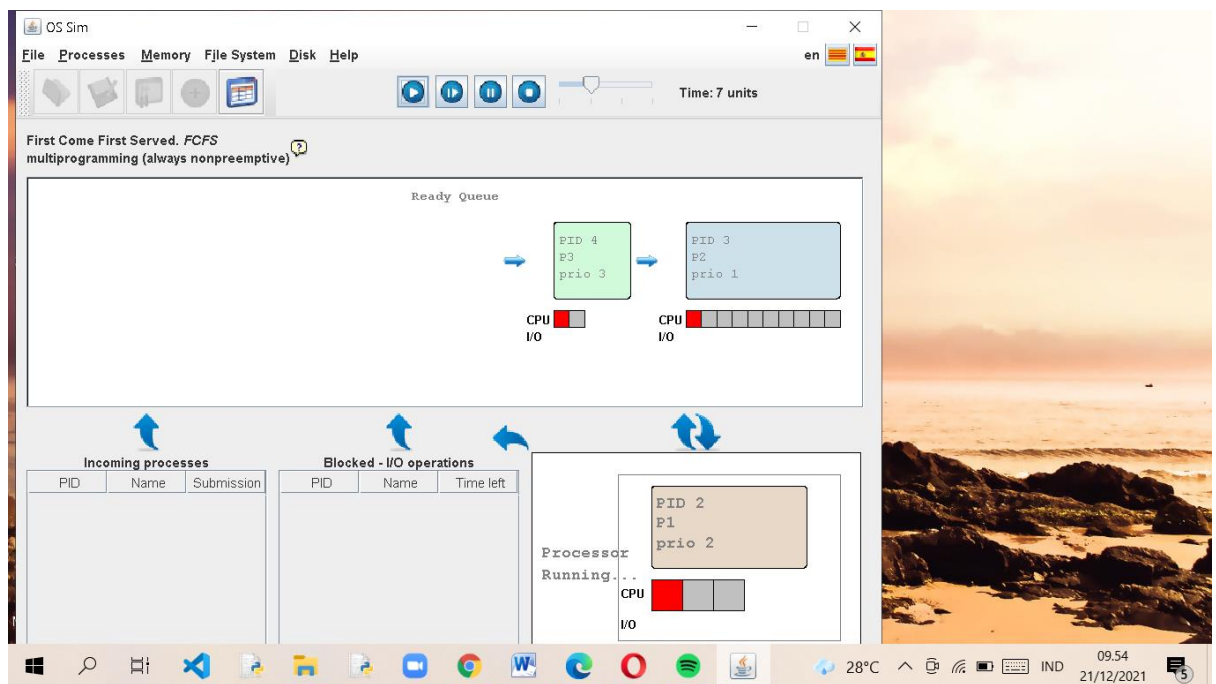
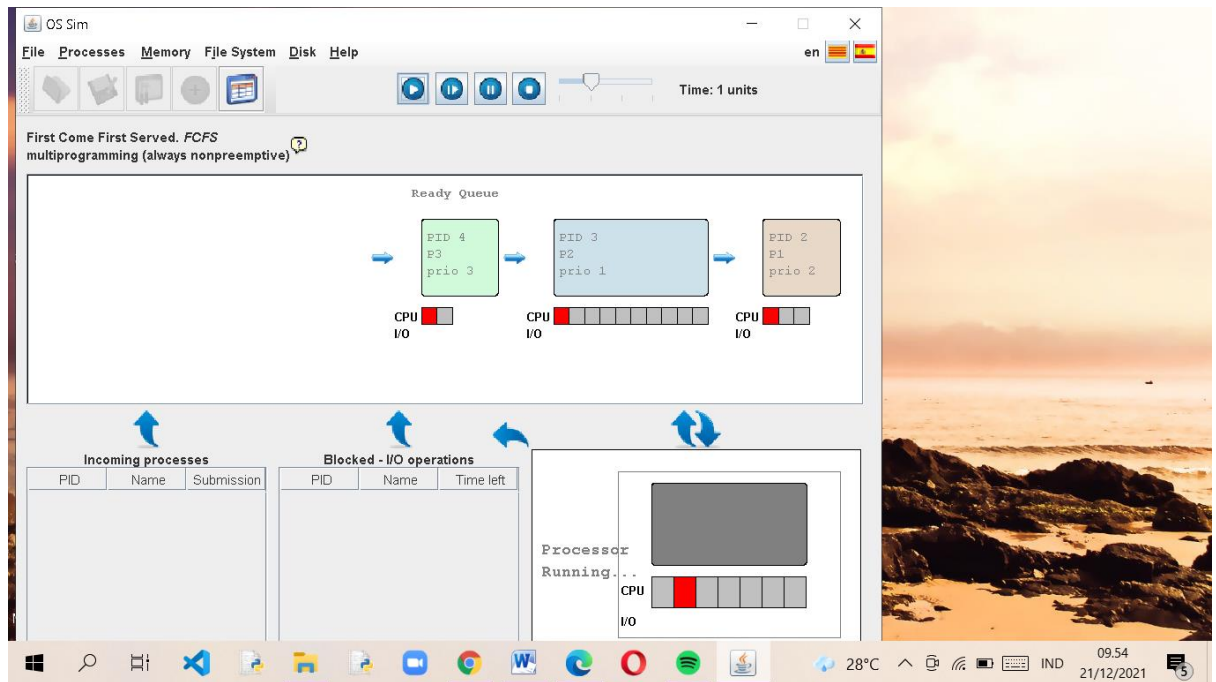
PID	Name	Submission
-----	------	------------

Blocked - I/O operations

PID	Name	Time left
-----	------	-----------

Processor  
Idle







OS Sim

File Processes Memory File System Disk Help

en

Time: 10 units

First Come First Served. FCFS  
multiprogramming (always nonpreemptive)

Ready Queue

PID 4  
P3  
prio 3

CPU I/O

Incoming processes

PID	Name	Submission
-----	------	------------

Blocked - I/O operations

PID	Name	Time left
-----	------	-----------

Processor Running...

PID 3  
P2  
prio 1

CPU I/O

28°C 09:54 21/12/2021

OS Sim

File Processes Memory File System Disk Help

en

Time: 20 units

First Come First Served. FCFS  
multiprogramming (always nonpreemptive)

Ready Queue

Incoming processes

PID	Name	Submission
-----	------	------------

Blocked - I/O operations

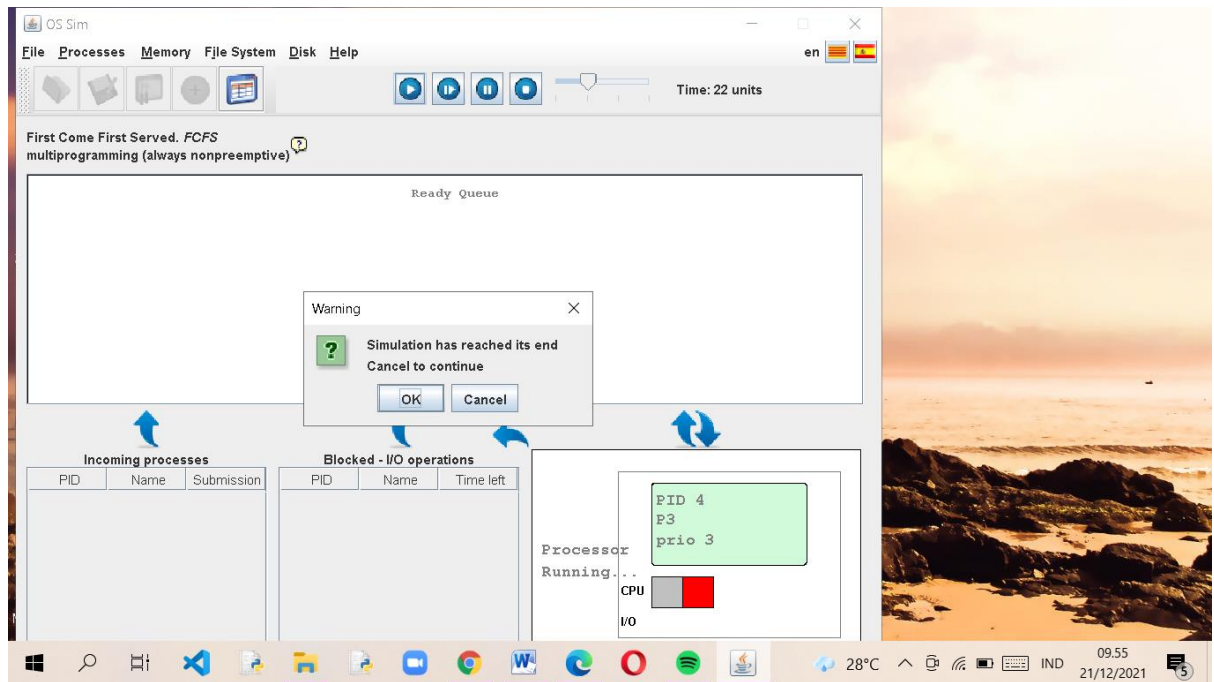
PID	Name	Time left
-----	------	-----------

Processor Running...

PID 4  
P3  
prio 3

CPU I/O

28°C 09:55 21/12/2021



OS Sim

File Processes Memory File System Disk Help

Time: 22 units

Process Scheduling Information

Efficiency (%) 1,00

Throughput (processes/time unit) 0,18

Avg. Turnaround Time (time) 14,75

Avg. Waiting Time (time) 9,25

Avg. Response Time (time) 9,25

PID	Name	Priority	Submission	Periodic	CPU	Response	Waiting	Turnaround	% CPU	% IO
1	P0	4	0	-	7	0	0	7	1.0	0.0
2	P1	2	0	-	3	7	7	10	0.3	0.0
3	P2	1	0	-	10	10	10	20	0.5	0.0
4	P3	3	0	-	2	20	20	22	0.09090909...	0.0

## 5. Tabel

Process	Wait time
P0	0
P1	7
P2	10
P3	20
Avg. Waiting time	9.25
Avg. Turnaround time	14.76
Avg. Response	9.25



