

Sistemas Informáticos (Computer Systems)

Unit 03. Activities 01



Authors: Sergi García, Alfredo Oltra

Updated September 2022



UNIT 03. ACTIVITIES 01

1. EXERCISE 01

Try to think between those concepts and discuss them in forum:

- A. In a system with “Programmed I/O”, which process state/s are not necessary?
- B. In a system with two processors, which process state/s should be added?

2. EXERCISE 02

Investigate for Windows and Linux what is the best configuration of virtual memory and why. Be careful, there are a lot of old explanations in Internet that are wrong. Discuss your conclusion in the forum.

If you want to know more about this topic, those articles could be useful:

- Part 1: <https://haydenjames.io/linux-performance-almost-always-add-swap-space/>
- Part 2: <https://haydenjames.io/linux-performance-almost-always-add-swap-part2-zram/>

3. EXERCISE 03

If you have 3 processes P1, P2, P3 and P4:

Process	Arriving time	CPU
P1	1	7
P2	4	5
P3	3	1
P4	2	4

Show the result if “short term scheduler algorithm” is:

- A. FIFO
- B. SRTF
- C. Round robin with Quantum=1
- D. Round robin with Quantum=3