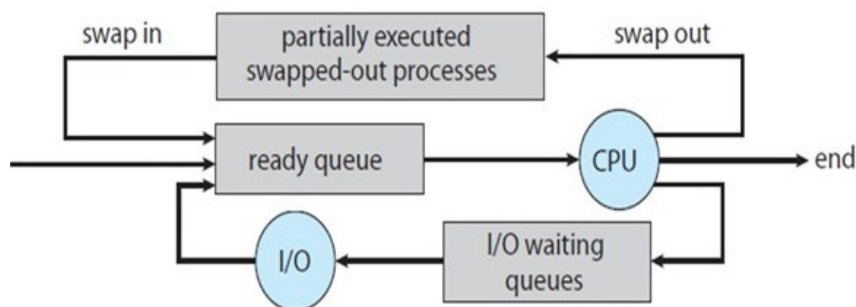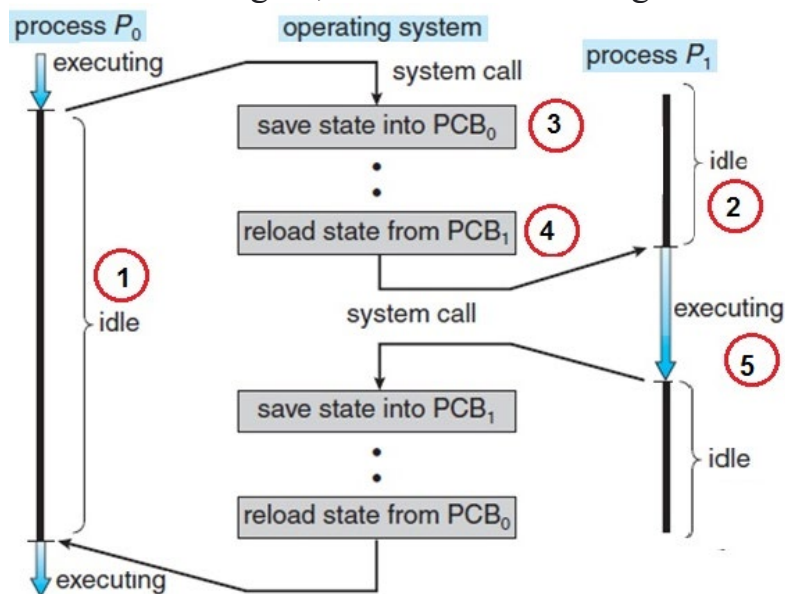## Exercises Week 3:

1. Describe the differences between short-term, medium-term, and long-term scheduling.
2. Describe the actions taken by a kernel to context-switch between processes.
3. Consider the processes scheduling diagram shown in the Figure below. Describe the nature of the CPU scheduler (scheduling algorithm) that causes the "swap out" of the processes during their execution.

4. The multiprogramming scenario for the two processes is shown in the figure below. Based on the figure, answer the following:

    4.1. Describe the importance of "save state into PCB0" and "reload state from PCB1" (indicated by 3 and 4).

    4.2. Describe the source of the system call that causes context switching.

    4.3. What is the CPU mode during the 1 and 2?

    4.4. What is the CPU mode during the 1 and 5?