

From last time

Does each of the following appear in processes, programs, both, or neither?

- instructions
- read-only data
- registers
- a stack
- a heap
- network connections
- system calls
- a shared data area

Program (loadable file): instructions (which refer to all the rest), read-only data (& loader info to set up stack etc.)

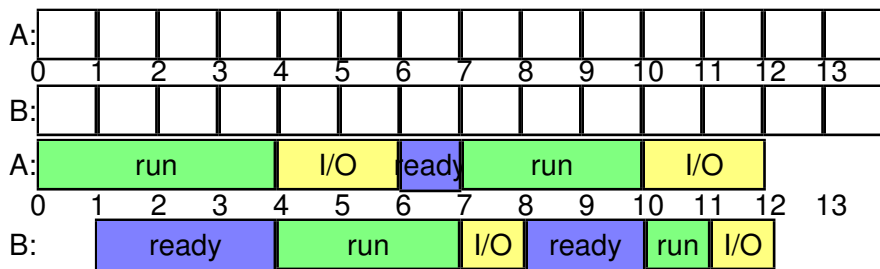
Process (running): everything (?)

(system calls only as instances of instructions, in the thread of computation)

Question - FCFS scheduling

Process A arrives at time 0: 4 time-units CPU, then 2 I/O, then 3 CPU, then 2 I/O

Process B arrives at time 1: 3 time-units CPU, then 1 I/O, then 1 CPU, then 1 I/O

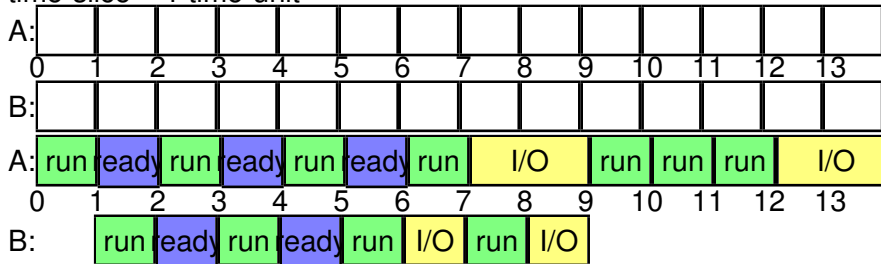


Question - Round-Robin scheduling

Process A arrives at time 0: 4 time-units CPU, then 2 I/O, then 3 CPU, then 2 I/O

Process B arrives at time 1: 3 time-units CPU, then 1 I/O, then 1 CPU, then 1 I/O

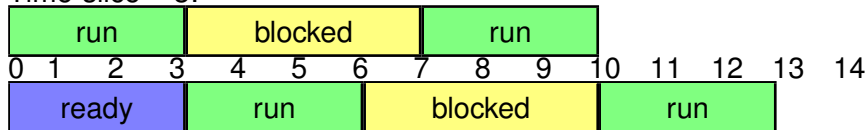
time-slice = 1 time-unit



Length of time-slice?

Two identical processes: 3 time-units CPU, then 4 time-units I/O, then 3 time-units CPU

Time-slice = 3:



Question: Time-slice = 2:

