The Problem

Imagine a 3 level feedback queue as described in the slides on MLFQ: Final Rules. Note that the final level is just Round Robin because priority can't get any lower. The quantum for priority 1 is 2, the quantum for priority 2 is 4, the quantum for priority 3 is 8.

We want to schedule 3 processes as described below. All processes start at t = 0.

- Process A will take 6 timeslots and no IO
- Process B has one timeslot and then will wait for an IO operation that will take 5 timeslots before it renters the ready queue. After that, it will take 4 timeslots of CPU
- Process C will take 10 timeslots and no IO

In this case, rather than do a GANTT chart, we ask you to 1) specify what process(s) CPU is running during at particular time; 2) plot the snapshoots of the queue states (i.e., what process is at which queue) at these moments

t = 0

Queue 1: A -> B -> C
Queue 2:
Queue 3:
CPU is running Process A

t = 5

t = 2

t = 8

t = 3

t = 10