3. Recall question 4 prompt from assignment 2, we now apply priority scheduling to the system. The higher the priority number is, the higher the process's priority. Processes P22 (with priority 6) and P17 (with priority 7) are executing. P7 (with priority 6) and P3 (with priority 7, first in the queue) are waiting for a socket write to complete. P4 (with priority 5, first in the queue) and P31 (with priority 4) are waiting on persistent storage access. P52 (with priority 6, first in the queue) and P29 (with priority 4) are awaiting to be scheduled on the CPU.

Suppose P3 and P4 both complete I/O operations at the same time, what would the process queueing diagram for these processes become? (Note each type of I/O has its own waiting queue)

