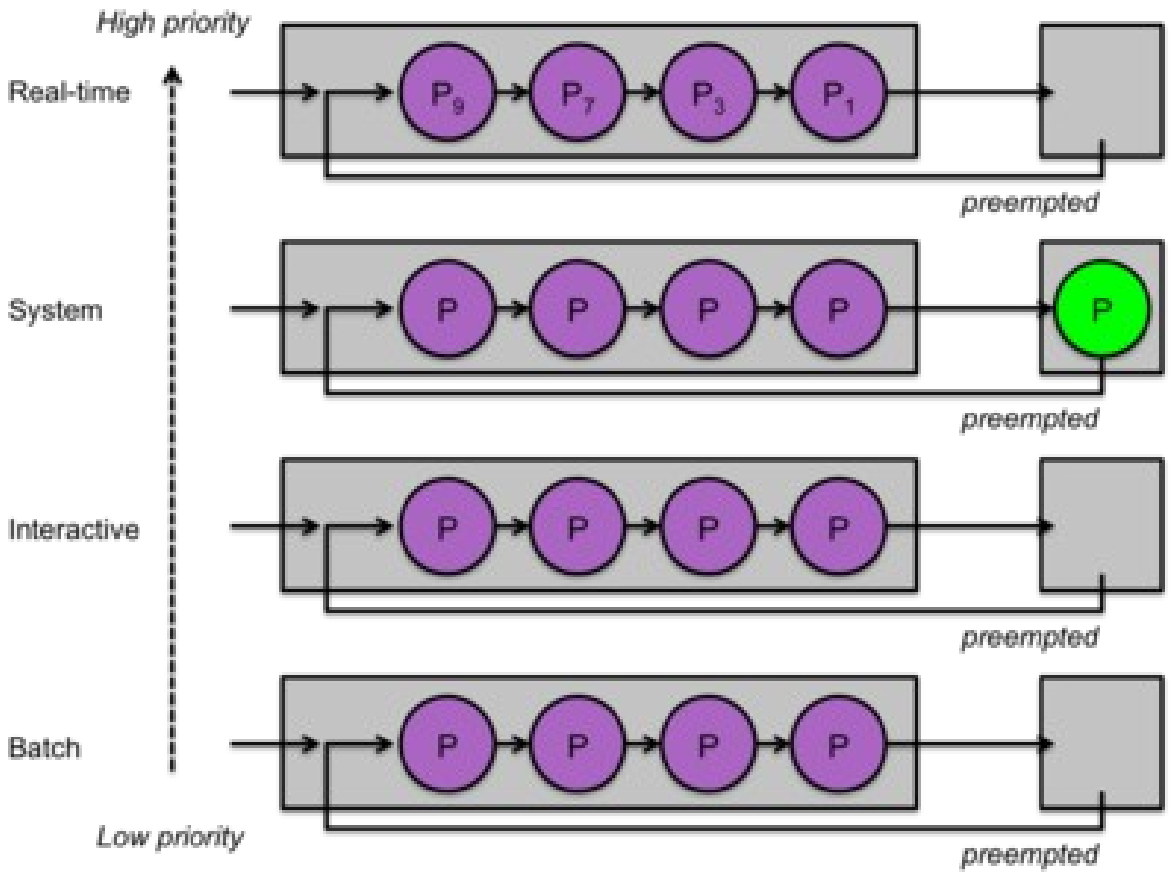
Multi-level & Multi-level Feed back Queues

https://people.cs.rutgers.edu/~pxk/416/notes/07-scheduling.html

Multi-level queue scheduling

Queue based on their type and each queue has its own scheduling



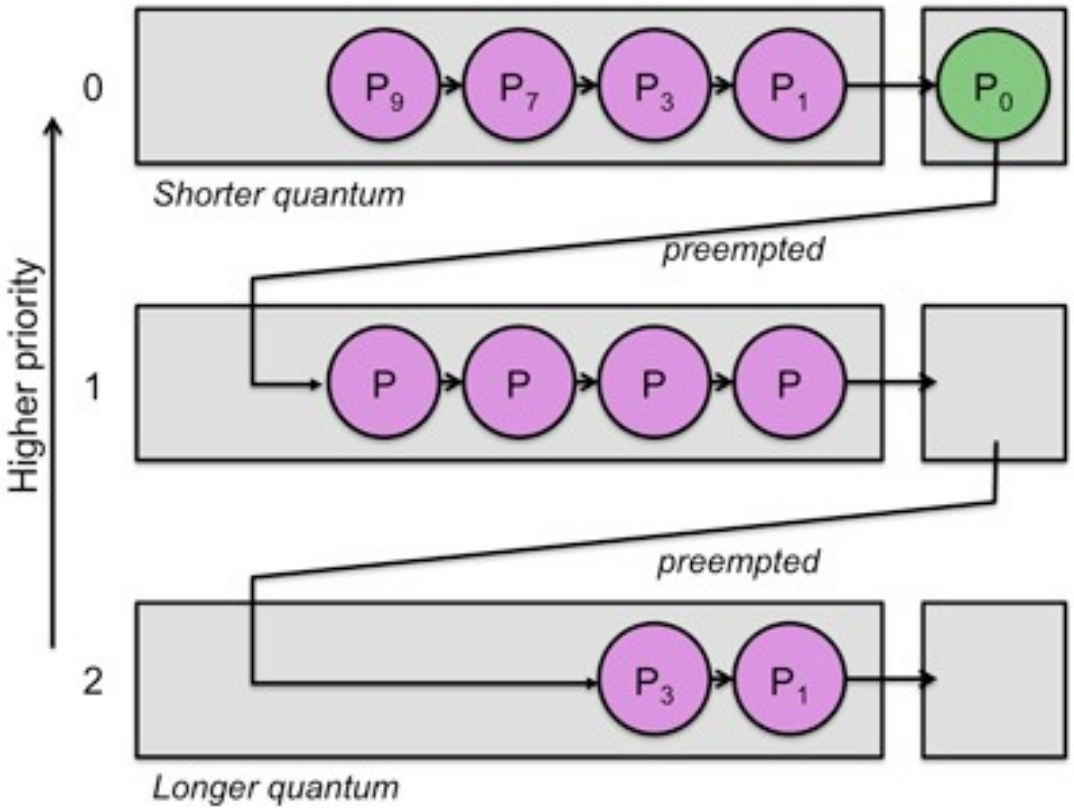
Property of process

- **System process, interactive,**
- **Batch system,**
- **End user process,**
- **Memory size,**
- **Process priority**
- **Process type.**

Multi-level Feedback queue scheduling

More than one queue and process can move between the Queues

- Scheduling Algorithm for each queue
- Aging can be achieved by moving the process from one queue to other
- Number of Queues influences MLFQ performance



Rules in MLFQ

Rule 1: If Priority(A) > Priority(B), A runs (B doesn’t).

Rule 2: If Priority(A) = Priority(B), A & B run in RR.

Rule 3: When a job enters the system, it is placed at the highest priority (the topmost queue).

Rules in MLFQ

Rule 4a: If a job uses up an entire time slice while running, its pri- ority is reduced (i.e., it moves down one queue).

Rule 4b: If a job gives up the CPU before the time slice is up, it stays at the same priority level.

Rule 5: After some time period S, move all the jobs in the system to the topmost queue.