

MLFQ (Ch 8.) Discussion Questions

- What are the goals of MLFQ?
 - minimize response time
 - minimize turnaround time
- How is an MLFQ scheduler built?
- Why are short jobs considered interactive and CPU-bound jobs considered to not have response time priority?
- Where do new jobs enter MLFQ?
 - to what end?
- What happens when a job uses its entire time slice?
 - to what end?
- How does MLFQ approximate SJF?
- What is starvation?
 - is it possible to starve in MLFQ? why (not)?

- What is “gaming the system/scheduler”?
 - is it possible in MLFQ?
- Does the anti-gaming rule 4 stop cheating & minimize TT for short jobs?
 - what if my job legitimately uses just about a whole timeslice and then does I/O?
- What is the longest a process can go without being scheduled in MLFQ?
 - $S + \text{top priority timeslice} * \# \text{ of processes}$
 - is this a hard bound (no because of # of processes)
- How can we measure fairness?
 - what illusion does CPU virtualization provide?
 - Generalized Processor Sharing (GPS)
- Is MLFQ fair?