CSC 369 Worksheet 5

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Source: link

1. Run a few randomly- problems with just two jobs and two queues; compute the MLFQ execution trace for each. Make your life easier by limiting the length of each job and turning off I/Os.

2. How would you run the scheduler to reproduce each of the examples in the chapter?

3. How would you configure the scheduler parameters to behave just like a round-robin scheduler?

4. Craft a workload with two jobs and scheduler parameters so that one job takes advantage of the older Rules 4a and 4b (turned on with the `-S` flag) to game the scheduler and obtain 99% of the CPU over a particular time interval.

5. Given a system with a quantum length of 10 ms in its highest queue, how often would you have to boost jobs back to the highest priority level (with the `-B` flag) in order to guarantee that a single longrunning (and potentially-starving) job gets at least 5% of the CPU?

6. One question that arises in scheduling is which end of a queue to add a job that just finished I/O; the `-I` flag changes this behavior for this scheduling simulator. Play around with some workloads and see if you can see the effect of this flag.