

Assignment 5

Output Guidelines for Scheduler Part

In the multi level scheduling part, you have to print status of each thread in console.

There can be four different states of any thread before termination:

1. in L1 queue
2. in L2 queue
3. in running state
4. in blocked state (by semaphore etc.)

You have to print in console if any thread changes its state. You should print the clock value, thread id, initial state (running/blocked/L1/L2), final state (running/blocked/L1/L2). For the clock thing, you can start a clock when the first thread is created and increment it at each tick.

The output format will be something like this (see the example below for a sample):

clock value: thread id goes to final state from initial state

Example:

Lets say we have two threads 1 and 2 and both of them need 5 time units (let's say one time unit is one tick) to execute. And we have a round robin scheduling with time quanta, $T = 2$ time unit. The initial clock values are only indicative, all threads may not be created at clock 0 if a tick comes in between.

Output:

```
0: thread 1 created and in L1 queue
0: thread 2 created and in L1 queue
0: thread 1 goes from L1 queue to running state
2: thread 1 goes to L1 queue from running state
2: thread 2 goes to running state from L1 queue
4: thread 2 goes to L1 queue from running state
4: thread 1 goes to running state from L1 queue
6: thread 1 goes to L2 queue from running state
6: thread 2 goes to running state from L1 queue
8: thread 2 goes to L2 queue from running state
8: thread 1 goes to running state from L2 queue
9: thread 1 finished
9: thread 2 goes to running state from L2 queue
10: thread 2 finished
```