



- Workload: $p_0 \sim p_7$ were forked in a for loop by a common parent.
- Observations:
 - **Rule 7:** When no higher priority job arrives, the process uses the entire time-slice in each level, as shown at timer ticks 120, 150, etc.
 - **Rule 10:** Every 100 ticks (1 second), the OS checks if any of the process gets starved, i.e. the priority level and the ticks it uses at that level remains the same as 1 second ago. If so, the priority level of that process gets bumped up. These events happen at, for example, at 320 for p_1 and p_2 , 420 for p_4 , p_5 and p_6 . At time tick 520, p_3 uses only 10 ticks but has to yield to p_7 because p_7 is starving and boosted to higher priority level which should use the CPU immediately.