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Assignment-3

Struct:

- o procid = process id
- o proctime = processing time
- o period = time after which process again repeats
- o repeatnum = numof times process comes into system
- o arrivaltime
- o completiontime = time at which process is completed
- o deadline = deadline of that particular process
- o remainingtime = time remaining to complete the process
- o waitingtime
- o preemption = stores whether the process is pre-empted or not
- o unfinishedprocess = number of process that doesnot meet its deadline

Algorithm:

- o Initially we open the "inp-params.txt" file and input the parameters.
- o Next, we create a priority queue and priority is checked by compare function
- o First, we check whether time is multiples of any non-terminated process period or not and then if yes and
- o If remaining time is still greater than 0 and current time crossed the deadline then we printout the missed deadline statement and update the values of unfinished process, waiting time, repeatnum, remaining time, pre-emption, deadline and arrival time
- o Else we push the process into the priority queue and update the values of arrival time, deadline, remaining time.
- o If no, then we take the top process from the priority queue and see whether process is started or completed, or CPU is idle or preempted by other processes not.
- o At last, we store the current process in a variable tempprocess2 so that it will be helpful in deciding preempted or not or CPU is idle or not