

CS471: Program 6 – LTU Scheduling

Write a C program that implements a basic LTU (least time used) scheduler. The program will read a data file named as a command line argument (examples are in `/u1/junk/cs471/sched.in.*`) containing three columns. The data is similar to the quiz data. The columns are given as follows.

1. The first column is the arrival time (time starts at 0).
2. The second column is the process ID (or pid).
3. The third column is the number of time units of CPU the process will need.

You may assume the data lines are sorted by arrival time. There may be more than one arrival during a time period. Process the events in the following order.

1. New arrivals are add to the runlist.
2. The process currently using the CPU is updated, and (if necessary) placed back in the runlist.
3. The process with the least time used is chosen from the runlist and assigned to the CPU. In case of ties, choose the process with the smallest PID.

Create a subdirectory of your home directory named `oct09`, and save your program there in a file named `oct09.c`. Due 3 PM, Wednesday October 9, 2019.