Programming Exercise 3.20 required you to design a PID manager that allocated a unique process identifier to each process. Exercise 4.20 required you to modify your solution to Exercise 3.20 by writing a program that created a number of threads that requested and released process identifiers. Now modify your solution to Exercise 4.20 by ensuring that the data structure used to represent the availability of process identifiers is safe from race conditions. Use Pthreads mutex locks.

Please note. If you used mutex locks in your solution to HW #2, please resubmit to get credit for HW#3.