

Quiz

March 28, 2023

Which of the following is/are true about race condition and mutual exclusion?

- ☒ A Implementation of critical sections require mutual exclusion, bounded-waiting and progress.
- ☒ B Race condition may happen when two processes concurrently access shared variables.
- ☐ C Priority inversion may happen when two processes are synchronized with semaphores.
- ☒ D Peterson's solution satisfies all the three requirements of critical section implementation

提交

Which of the following is/are true about semaphores?

- ☐ A A binary semaphore could only have two values whereas a counting semaphore could have more than two values.
- ☒ B Semaphores must be implemented in the kernel.
- ☐ C When solving producer-consumer problem with semaphores, it is OK to swap the order of wait(&fill) and wait(&mutex).
- ☐ D In the correct solution to dining philosopher problem, semaphore is used to model a chopstick.

提交