Quiz#4
CS-5Z

Time: <u>8 mins</u>

Q1# If two threads are waiting on the same semaphore initialized to zero, describe the sequence of events that would occur when another thread calls ***sem_post*** twice.

- The first **sem_post** increments the semaphore count to 1, unblocking one of the waiting threads.
- The unblocked thread executes and decrements the semaphore count to 0.
- The second **sem_post** increments the semaphore count again, unblocking the other waiting thread.

Q2# Write a program using a binary semaphore where:
- Three threads attempt to enter a critical section.
- Ensure only one thread enters at a time.
- Each thread prints its ID upon entering and exiting the critical section.