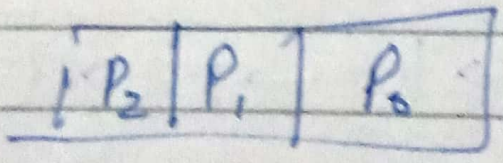
Counting Semaphore :-

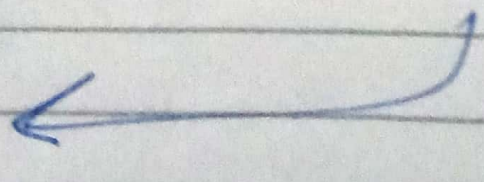
It is an integer value that can store valued over unrestricted domain.

→ It is necessary for processes to acquire wait signal to get a resource and they send signal when releasing information.

→ In a binary semaphore, int value is either 1 or 0.

→ Wake up call is required for processes to enter critical section.

e.g. 



↳ When P_0 will be done, wake up call is made on P_1.

→ Semaphore reduce spinlocking by creating waiting queue.

→ After executing wait(), the process must block and be placed in waiting queue.

→ Control is given back to the CPU Scheduler to schedule new process.

→ Process leaves CPU, sends signal at which waiting queue is got a wake up is sent and then a new process enters the ready queue and waits for its turn.