18CS43-OS

Module 2- Super Imp

① Afreen Maryam

② - afrin

Q1. Explain the multithreading models with diagrams.

Q2. SJF, FCFS, RR, SRTF algorithms numerically solve them, explanation of the video. Repeated

Q3. Explain:-

-> Reader-writer problem

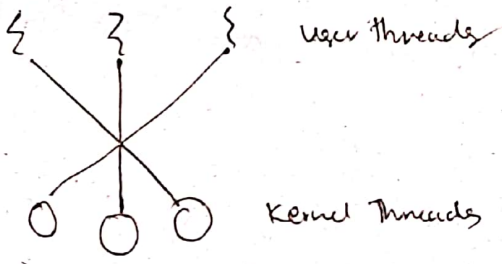
-> Dining Philosopher soln [Monitors defn.]

-> Peterson's soln for critical problem

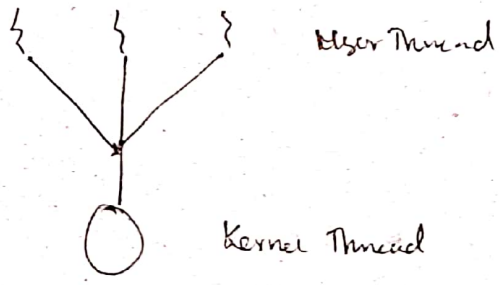
Q4. What are semaphores, explain how mutual exclusion is implemented with semaphores

Soln: Multithreading Models

1) Many to Many Model

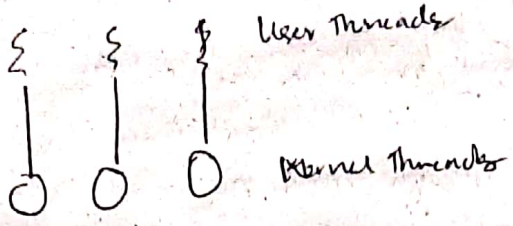


2)



Many - to - one model

3) One-to-One Model



Soln2: SJF : Shortest Job First

FCFS : First Come First Serve

RR : Round Robin

SRTF : Shortest Remaining Time First.

Soln3: Reader writer Problem :- Sync between Reading material and writing the content.

Dining Philosopher :- 5 philosophers are sitting round a table and eating. They can eat only by using two hands and only 5 chopstick are available ---

Peterson's critical section :- To avoid deadlock.

Soln4: Semaphores :- Binary locks