

1. Scheduling Algorithms
 - a. Simulation of each algorithm
 - b. Advantages and disadvantages of each algorithm
2. What is Starvation?
 - a. Can starvation occur during Scheduling? When and When Not? How can you solve them?
 - b. Can starvation occur during Inter Process Communication? When and When Not? How can you solve them?
3. What is Deadlock?
 - a. Can deadlock occur during Scheduling? When and When Not? How can you solve them?
 - b. Can deadlock occur during Inter Process Communication? When and When Not? How can you solve them?
4. How many ways are there to communicate among processes? What are the advantages and disadvantages of each method?
5. What is Semaphore? Why was this Invented?
 - a. What types of Semaphores are there? What does each of them solve?
 - b. What is the working principle of Semaphore? What signals does Semaphore have? What variables/methods/functions does Semaphore implement?
6. What is a Producer Consumer Problem? What method do we use to solve it?
 - a. How can you solve the Producer Consumer Problem using Semaphore?
 - b. What happens if there are MULTIPLE producers and/or consumers? What are the difficulties in that case, and how can you solve them?
7. What is Mutex/ Mutex Lock? What is the job of this?
 - a. Difference between Mutex and Semaphores