Assignment #3	
CLO 4: Implement various pieces of OS software	
Maximum Marks: 40	**Instructor:** Dr. Rabia Irfan
Announcement Date: 15th May 2024	**Due Date:** 25th May 2024

Instructions:
- This assignment can be done individually or in a group of 3-4.
- Submission via LMS link.
- Written assignment, scan and upload pdf or Can be done digitally

Questions:

Q1. [10 pts] Implement the Reader Writer process synchronization problem using Monitors. Show your pseudo code as working in the solution. You may adopt the same pattern for the pseudo code as given for dining Philosopher problem in the lecture slides.

Q2. [10 pts] Solve Question#2 and Question#5 given in the "Process Synchronization (Questions)" slides uploaded on LMS.

Q3. [20 pts] Determine the level of hierarchical pages required for the given values:

a) Address bits in logical/virtual address = 64
b) Page size = 4KB
c) Size of each entry in page table = 4B

Also determine the offset and page table offset values for the above setup.