Quiz:

Consider a situation where we have a file shared between many people.

If one of the people tries editing the file, no other person should be reading or writing at the same time, otherwise, changes will not be visible to him/her.

However, if some person is reading the file, then others may read it at the same time.

Precisely in OS we call this situation as the **readers-writers** problem

Create 6 threads, 3 threads are for reading purposes and 3 of them are for writing purposes. Execute the all writer threads first before allowing the reader threads to start work.

The output could be follows as:

Thread 1: Hello, this is writer thread Thread 2: Hello, this is writer thread Thread 3: Hello, this is writer thread Thread 4: Hello, this is reader thread Thread 5: Hello, this is reader thread Thread 6: Hello, this is reader thread

Note: The program is to be write only using semaphores and threads. Your thread numbers may vary.