1. Explain the purpose of the java.rmi.registry.Registry interface in RMI and how it is used to locate remote objects.
2. Discuss the role of the java.rmi.Remote interface in defining remote interfaces for RMI objects.
3. Discuss whether the following operations are idempotent:

i) pressing a lift (elevator) request button;

ii) writing data to a file;

iii) appending data to a file.

Is it a necessary condition for idempotence that the operation should not be associated with any state?

1. Explain the client-server architecture in the context of Remote Procedure Call (RPC), including the roles of client and server processes.
2. A student wants to access lecture notes, assignments, and course materials stored on a university file server from their personal laptop. How can NFS be used to mount the university's file system on the student's laptop, allowing them to access files remotely from anywhere on campus?
3. Discuss the security considerations and mechanisms available for securing NFS communication and file access