

DBMS Lab: 11.03.2026 'N' Batch

A University maintains a database with the following tables:

STUDENT(StudentID, Name, Course, Marks)

FACULTY(FacultyID, Name, Department)

RESULT_LOG(LogID, StudentID, Marks, Status)

There are three users in the system: Admin, Professor, and Clerk. The Admin wants to control access to the database using GRANT and REVOKE commands.

Questions:

1. Create two users **Professor** and **Clerk** with passwords.
2. Admin should grant the following privileges:
 - Professor can **SELECT and UPDATE** data from the **STUDENT** table.
 - Clerk can **only view (SELECT)** the **STUDENT** table.
3. Admin grants permissions on **FACULTY** table:
 - Professor can **SELECT** data from FACULTY.
 - Clerk can **INSERT** new faculty records.
4. Admin allows **Professor** to give **SELECT permission on STUDENT** to other users. Write the SQL command using **WITH GRANT OPTION**.
5. Professor grants **SELECT privilege on STUDENT** to Clerk. Write the SQL command.
6. Admin decides that **Clerk should not insert records into FACULTY**. Write the SQL command to remove this permission.
7. If **Admin revokes SELECT privilege on STUDENT from Professor**, what happens to the privilege granted to **Clerk** by Professor?
8. Admin grants **SELECT, INSERT, UPDATE** privileges on the **STUDENT table** to Professor. Write the SQL command.
9. Admin removes **UPDATE privilege** on STUDENT from Professor. Write the SQL command.
10. Admin grants **UPDATE** privileges to update **only Marks** on the **STUDENT table** to Professor. Write the SQL command.
11. **Spot Question:** Create **Trigger** whenever marks are updated, the result should be logged automatically. Professor updates marks, trigger automatically inserts into RESULT_LOG.
12. **Spot Question:** Create **Procedure** to display students who passed. Professor can update marks and execute procedure.