INT207 Lab 5

Task 1: Using Roles
Connect the database as user <DBxxxx>

1. Revoke all object privileges on PHONELIST from the user <APPxxxx> .

   REVOKE all ON phonelist FROM APPxxxx;

2. Create a role named R_DEVxxxx and grant the SELECT and UPDATE privileges on the PHONELIST table to the R_DEVxxxx role.

   CREATE ROLE R_DEVxxxx;
   GRANT select, update ON phonelist TO R_DEVxxxx;

3. Create a role named R_MGRxxxx and grant the INSERT and DELETE privileges on the PHONELIST table to the R_MGRxxxx role.

   CREATE ROLE R_MGRxxxx;
   GRANT insert, delete ON phonelist TO R_MGRxxxx;

4. *Grant the role* R_DEVxxxx to the R_MGRxxxx role.

   GRANT R_DEVxxxx TO R_MGRxxxx;

   --To describe the roles granted to other roles--
   SELECT * FROM role_role_privs;

5. Grant the R_DEVxxxx role to user <APPxxxx> that can be passed the granted role to other users and roles.

   GRANT R_DEVxxxx TO APPxxxx WITH ADMIN OPTION;

Connect the database as user <APPxxxx>
Note*: If you do Lab 3 completely, the password of a user <APPxxxx> will be <dbms>.*

6. Verify the granted role by checking data from data dictionary views.

   SELECT * FROM user_role_privs;

7. *Now, Can user* <APPxxxx> select all columns of DBxxxx.PHONELIST table? [**Y**|N]

   --If user APPxxxx is connecting to the database, please reconnect to the database.
   SELECT * FROM DBxxxx.PHONELIST;

Connect the database as user <DBxxxx>

8. Revoke the R_DEVxxxx role from user <APPxxxx> and grant the R_MGRxxxx role to user <APPxxxx>.

   REVOKE R_DEVxxxx FROM APPxxxx;
   GRANT R_MGRxxxx TO APPxxxx ;

Connect the database as user <APPxxxx>

9. Verify the granted role by checking data from data dictionary view.

   SELECT * FROM user_role_privs;

10. *Now, Can user* <APPxxxx> *delete a row of* DBxxxx.PHONELIST *table?* [**Y**|N]

    Hint: If you can delete it, please rollback the deletion.
    --If user APPxxxx is connecting to the database, please reconnect to the database.
    DELETE FROM DBxxxx.PHONELIST;
    ROLLBACK;

Connect the database as user <DBxxxx>

11. Revoke ONLY the UPDATE privilege from the R_DEVxxxx role.

    How does this revoke effects to the user <APPxxxx>? *Please verify*
    REVOKE update ON phonelist FROM R_DEVxxxx;

12. User <DBxxxx> wants to limit the role R_DEVxxxx to update data ONLY column PHONE_NUMBER of the DBxxxx.PHONELIST table.

    How does user <DBxxxx> do for supporting the requirement? Please do it.

    GRANT update (phone_number) ON phonelist TO R_DEVxxxx;

13. Remove the R_MGRxxxx role.

    DROP ROLE R_MGRxxxx;

14. Verify that the role R_MGRxxxx is removed.

    ----If you are not DBA, you cannot access the DBA_ROLES data dictionary view.

    SELECT role FROM dba_roles
    WHERE role ='R_MGRxxxx';

———————————————