Concept: Security Management using SQL

Aim: To study create user and DCL commands.

Theory:

Data Control Language Commands (DCL)

GRANT REVOKE

Syntax: to create user

Create user <username> identified by <password>;

Syntax to grant the privileges

Grant <pri>privileges> on <tablename>/<viewname> to <username>;
e.g.SQL>Grant select, insert on table1 to <user1>;

Grant <pri>privileges> on <tablename>/<viewname> to <username> with grant option;

The with grant option helps to grant the same privilege on the table to user 2 by user 1.

Syntax to revoke the privileges

Revoke <pri>privileges> from <tablename>/<viewname> to <username>;</pr>
e.g.SQL>Revoke select, insert on table1 from <username>;

Syntax to drop the user

Drop user <username>;

Exercise

- 1. Create a user
- 2. Grant create session privilege to this user.
- 3. Grant select privilege on some table to this user
- 4. Exit and log into the new user
- 5. Execute select query.
- 6. Similarly give privileges on view to new user and check DML command like insert, delete, update and check for data consistency i.e. changes made by new user are reflected in both parent table as well as view table.
- 7. Demonstrate "with grant option".
- 8. Revoke the privileges from the user and try displaying the records from the table by new user.
- 9. Drop the user.