**Program 9 - DCL and TCL**

**TCL – Commit ,Rollback, Savepoint**

**COMMIT –** Commits a Transaction.When a successful transaction is completed, the COMMIT command should be issued so that the changes to all involved tables will take effect.

Eg - DELETE FROM Tbl\_Employee WHERE EmployeeID = 4;

COMMIT; ##transaction has been complete

**ROLLBACK – Rollback a transaction in case of any error occurs.**

**SAVEPOINT – To rollback the transaction making points within groups.**

DELETE FROM Tbl\_Employee WHERE EmployeeID = 1;

SAVEPOINT tran1;

DELETE FROM Tbl\_Employee WHERE EmployeeID = 2;

SAVEPOINT tran2;

ROLLBACK TO tran1; ##roll back trans1

**DCL –**

**Lists usernames that have access to the server -**

SELECT user FROM mysql.user;

### **Lists down user Database Fields –**

### desc mysql.user;

The options in the Field column represent the information we can request from the mysql.user database.

**Show Current MySQL User -**

SELECT user();

## Create User –

## To create a new user in MySQL, we run the MySQL CREATE USER command:

## CREATE USER 'sumana'@'localhost' IDENTIFIED BY 'password';

## To run this command yourself:

## Change the new\_username to the username you want to create.

## Change the user\_password to the password you want for this new user.

## Run the command

## Granting privileges –

GRANT CREATE, ALTER, DROP

ON yourdb.\* TO 'sumana'@'localhost';

## This will give the privileges to all tables on the database “yourdb”, which you would substitute with your actual database name.

## To give all privilages to user, use ALL PRIVILAGES

## Viewing Privileges -

SHOW GRANTS FOR 'sumana'@'localhost';

## Now, Log In as New User and check privilages

## To Remove Privileges –

## Syntax -

REVOKE privilege ON database.table FROM 'username';

This example removes the Create privilege for user Sumana

REVOKE CREATE ON database.\* FROM 'sumana';

## Delete a User

If you want to delete a MySQL user from the database, you can use the DROP USER command.

DROP USER 'sumana'@'localhost';