



Vidyavardhini's College of Engineering and Technology
Department of Artificial Intelligence & Data Science

Experiment No.7
Perform DCL and TCL commands
Date of Performance:
Date of Submission:



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Aim :- Write a query to implement Data Control Language(DCL) and Transaction Control Language(TCL) commands

Objective :- To learn DCL commands like Grant and Revoke privileges to the user and TCL commands to commit the transactions and recover it using rollback and save points.

Theory:

Data Control Language:

DCL commands are used to grant and take back authority from any database user.

- Grant
- Revoke

a. Grant: It is used to give user access privileges to a database.

Example

1. GRANT SELECT, UPDATE ON MY_TABLE TO SOME_USER,
ANOTHER_USER;

b. Revoke: It is used to take back permissions from the user.

Example

1. REVOKE SELECT, UPDATE ON MY_TABLE FROM USER1, USER2;

Transaction Control Language

TCL commands can only use with DML commands like INSERT, DELETE and UPDATE only.

These operations are automatically committed in the database that's why they cannot be used while creating tables or dropping them.

Here are some commands that come under TCL:

- COMMIT
- ROLLBACK
- SAVEPOINT



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a. Commit: Commit command is used to save all the transactions to the database.

Syntax:

1. COMMIT;

Example:

1. DELETE FROM CUSTOMERS
2. WHERE AGE = 25;
3. COMMIT;

b. Rollback: Rollback command is used to undo transactions that have not already been saved to the database.

Syntax:

1. ROLLBACK;

Example:

1. DELETE FROM CUSTOMERS
2. WHERE AGE = 25;
3. ROLLBACK;

c. SAVEPOINT: It is used to roll the transaction back to a certain point without rolling back the entire transaction.

Syntax:

2. SAVEPOINT SAVEPOINT_NAME;

Implementation:

Conclusion:

1. Explain about issues faced during rollback in mysql and how it got resolved.
2. Explain how to create a user in sql.