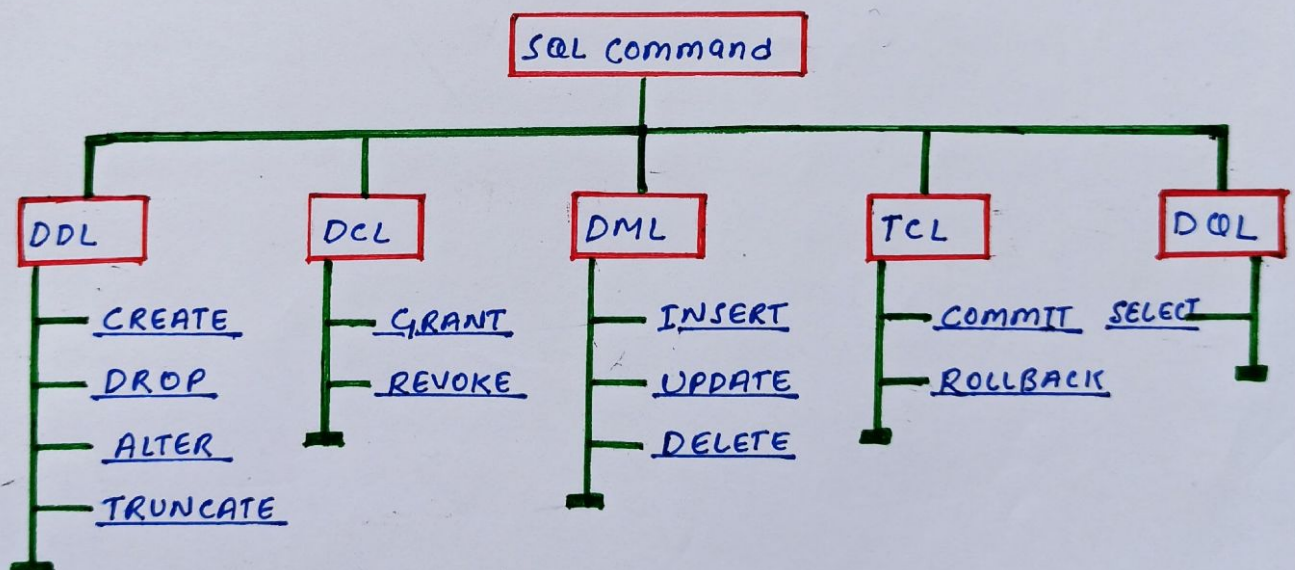# SQL COMMANDS

SQL Commands:

- SQL commands are the instructions. It is used to communicate with a database.

- It is also used to perform specific task, functions and queries of data.

ATUL KUMAR (LINKEDIN)
TELEGRAM - NOTES GALLERY.

Types of SQL Commands:

```
                    SQL Command
        ┌─────┬─────┬─────┬─────┬─────┐
       DDL    DCL   DML   TCL   DQL
```

DDL	DCL	DML	TCL	DQL
CREATE	GRANT	INSERT	COMMIT	SELECT
DROP	REVOKE	UPDATE	ROLLBACK	
ALTER		DELETE		
TRUNCATE				

1]. DDL (Data defination Language) :

- DDL changes the structure of the table like creating table, deleting a table, altering a table.
- All the commands of DDL are auto-commited that means it permanently save all the changes In the database.

★ <mark>Commands under DDL:</mark>

a]. **Create :-** It is used to Create a new table.

Syntax:

```
CREATE TABLE .table_name
( Column_name DataType [...]);
```

b]. **DROP :-** It is used to delete both structure & records stored in a table.

Syntax: DROP TABLE table_name;

c]. **ALTER :-** It is used to Alter the structure of the database. This change could eigther to modify the characterstics of an exesting attribute or probably to add a new attribute.

d]. **TRUNCATE :-** It is used to delete all the rows from the table and free the space Combining the table.

Syntax: TRUNCATE TABLE table_name;

2). <mark>DML (Data Manipulation Language):</mark>

- DML commands are used to modify the database. It is responsible for all form of changes In the database.

- The command OF DML is not auto-comited that means It is permanent saved all the changes In the database.

- **Commands under DML :-**

a). **Insert :-** It is used to insert data into rows of table.
  Syntax:

    INSERT INTO table_name
    (col₁ , col₂ , col₃ , ... colₙ)
    VALUES (value1, value², value3 .... value N);

b). **UPDATE :-** This command is used to update or modify the value of a column in the table.
  Syntax:

    UPDATE table_name SET
    [column_name1 = value 1 , ...
    column_name n = value N]
    [WHERE CONDITION].

c). **DELETE :-** It is used to remove one or more rows from table.
  Syntax:

    DELETE FROM table_name
    [WHERE CONDITION].

3 **DCL (Data control Language):**

- DCL commands are used to grant and take back authority from only database USER.

- **Commands under DCL :-**

a). **GRANT :-** It is used to give user Access privileges to a database.

  Syntax:

    GRANT SELECT, UPDATE ON MY_TABLE TO SAME
                            _USER, another-USER;

b). REVOKE :- It is used to take back permission from the USER.

Syntax :

REVOKE select , UPDATE ON MY_TABLE

FROM USER1 ; USER 2 ;

---

4). TCL (Transaction Control Language) :

- TCL commands can only used with DML commands like insert, Delete & Update only.
- These Operation are automatically commited in the database that's why cannot be used while creating tables or dropping them.

- Commands Under TCL :-

a). Commit :- Commit Command is used to save the transactions to the database.

Syntax :

COMMIT :

Example : DELETE FROM CUSTOMERS

WHERE AGE = 25 ;

COMMIT ;

b). Roll back :- Rollback Command is used to Undo transaction that have not already been saved to the database.

Syntax :

ROLLBACK :

Example :

DELETE FROM CUSTOMERS

WHERE AGE = 25 ;

ROLL BACK ;