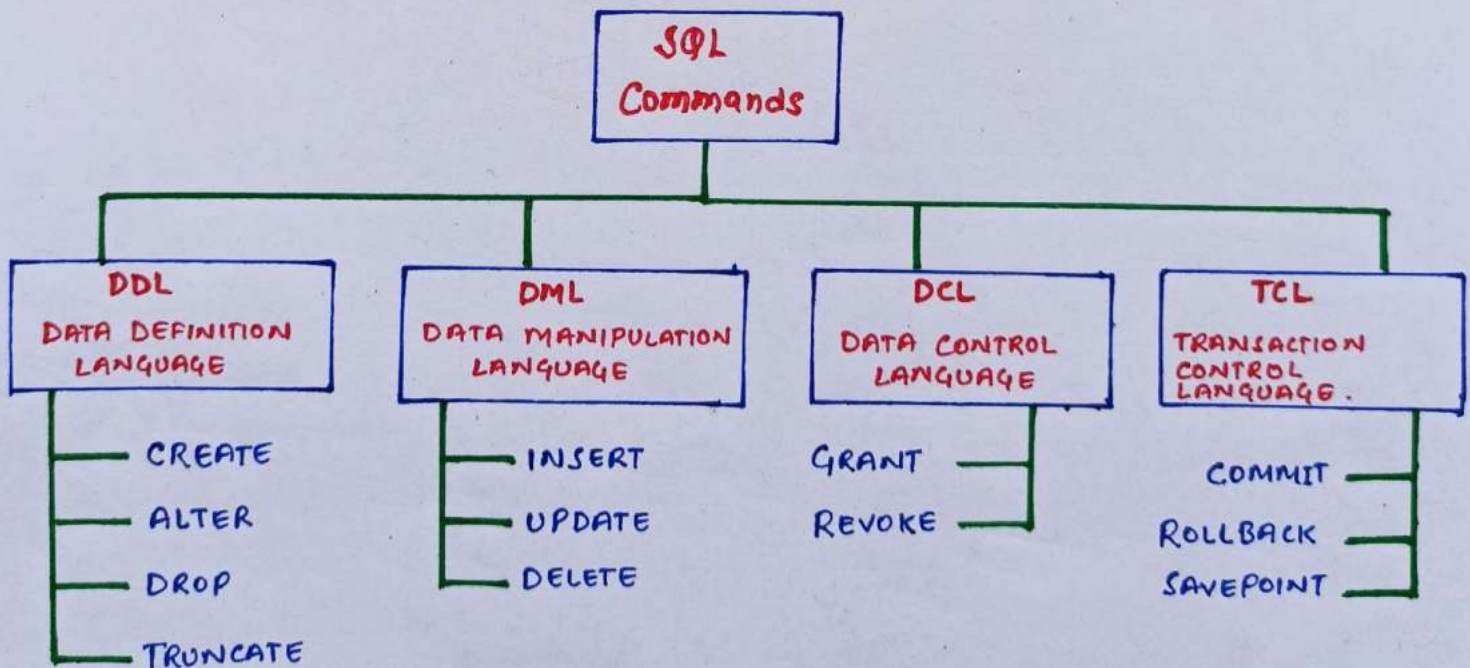


What is SQL?

- SQL is stand for structured query language.
- This database language is mainly designed for maintaining the data relational database management systems.
- SQL is standard language for accessing and manipulating database.

Types of SQL Commands:



DDL COMMANDS:

- DDL (Data Definition Language) used to change the structure of the table like creating the table, altering the table & Deleting the table.
- All the commands in the DDL are auto Committed that means it permanently saves all the changes in the database.

1. CREATE:

this command is used to create a new database or table.

Syntax:

```
CREATE TABLE table_name (  
    Column1 datatype,  
    Column2 datatype,  
    Column3 datatype,  
    ...  
);
```

Example:

```
CREATE TABLE Employee  
(  
    EmployeeID int,  
    Firstname varchar(255),  
    Lastname varchar(255),  
    AddressLine varchar(255),  
    City varchar(255)  
);
```

ATUL KUMAR (LINKEDIN).
NOTES GALLERY (TELEGRAM).

2. Alter

The ALTER TABLE statements in Structured Query Language allow to add, modify, and delete columns of an existing table.

Syntax:

```
ALTER TABLE table-name  
ADD column_name datatype
```

Example:

```
ALTER TABLE Employee  
ADD Email varchar (255);
```

3. DROP

ATUL KUMAR (LINKEDIN).
NOTES GALLERY (TELEGRAM).

The DROP Table statement is used to drop an existing table in a database. this command deletes both the structure & Records stored in table.

Syntax:

```
DROP TABLE table_name;
```

Example:

```
DROP TABLE Employee
```

4. TRUNCATE

A truncate SQL statement is used to remove all rows (complete data) from a table. It is similar to DELETE statement with no WHERE clause.

Continue →

Syntax:

TRUNCATE TABLE table_name;

Example:

TRUNCATE TABLE Employee;

DML COMMANDS:

ATUL KUMAR (LINKEDIN).
NOTES GALLERY (TELEGRAM).

1. INSERT

SQL INSERT statement is a SQL query. It is used to insert a single or a multiple records in a table.

Syntax:

INSERT INTO table_name

VALUES (value1, value2, value3....);

Example:

INSERT INTO STUDENTS (ROLL_NO, NAME, AGE, CITY)
VALUES (1, Yagnyesh, 19, PUNE);

2. UPDATE

The UPDATE statement is used to modify the existing records in a table.

Syntax:

UPDATE table_name

SET column1 = value 1, column 2 = value 2,

WHERE condition;

Continue →

→
Example:

```
UPDATE Customers  
SET contactName = 'yadu', City = 'Pune'  
WHERE CustomerID = 101;
```

3. DELETE

The DELETE statement is used to delete existing records in a table.

Syntax:

```
DELETE FROM table_name [WHERE condition];
```

Example:

```
DELETE FROM Customers WHERE CustomerName = 'yadu';
```

DCL COMMANDS:

ATUL KUMAR (LINKEDIN).
NOTES GALLERY (TELEGRAM).

1. GRANT

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

Syntax:

```
GRANT SELECT, UPDATE ON MY_TABLE TO SOME_USER,  
ANOTHER_USER;
```

2. REVOKE

This command withdraws the user's access privileges given by using the GRANT command.

```
GRANT SELECT, UPDATE ON MY_TABLE TO SOME_USER, ANOTHER_USER;
```

Syntax: REVOKE SELECT, UPDATE ON MY_TABLE FROM USER1, USER2;

TCL COMMANDS

1. COMMIT

Commit a Transaction. The COMMIT command saves all the transactions to the database since the last COMMIT or ROLLBACK command.

Syntax:

COMMIT;

Example:

DELETE FROM student WHERE AGE = 20;

COMMIT;

ATUL KUMAR (LINKEDIN).
NOTES GALLERY (TELEGRAM).

2. ROLL BACK

If any error occurs with any of the SQL grouped statements, all changes need to be aborted. The process of reversing changes is called rollback.

Syntax:

ROLLBACK;

Example:

DELETE FROM student WHERE AGE = 20;

ROLLBACK;