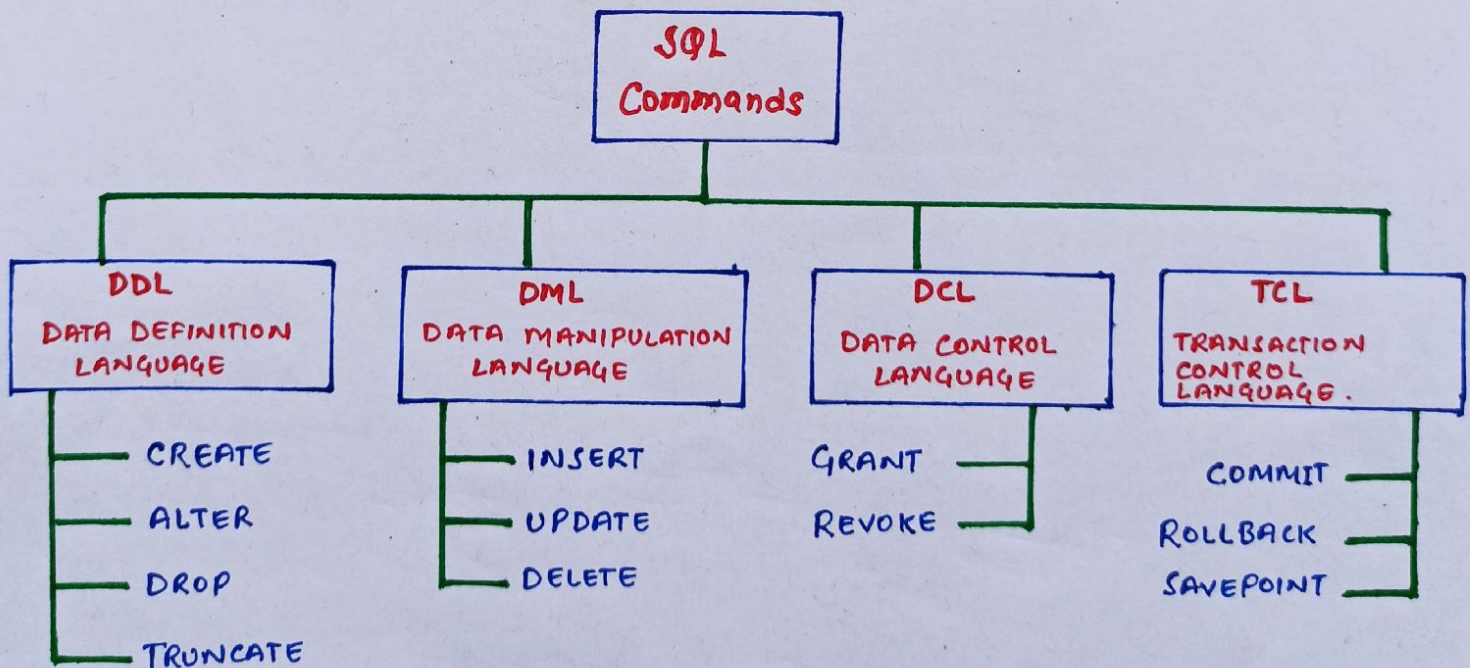


### What is SQL?

- 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)  
);
```

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## 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

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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:

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### 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, YADNYESH, 19, PUNE);

### 2. UPDATE

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

Syntax:

UPDATE table\_name

SET column1 = value1, column2 = value2, ....

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:

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### 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;

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## 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;