SQL Commands:

1. DDL – Data Definition Language

These commands define and modify the **structure** of database objects like tables, schemas, etc.

Common DDL Commands:

- **CREATE** – Creates a new table or database
- **ALTER** – Modifies an existing database object
- **DROP** – Deletes a table or database
- **TRUNCATE** – Removes all records from a table (structure stays)

Example:

CREATE TABLE Employees (

   ID INT,

   Name VARCHAR(50)

);

2. DML – Data Manipulation Language

These commands are used to **manipulate data** within tables.

Common DML Commands:

- **INSERT** – Adds new data
- **UPDATE** – Modifies existing data
- **DELETE** – Removes specific data

Example:

INSERT INTO Employees (ID, Name) VALUES (1, 'John');

3. DQL – Data Query Language

Used for **retrieving data** from databases.

Key DQL Command:

- **SELECT** – Extracts data based on given criteria

Example: SELECT * FROM Employees WHERE ID = 1;

4. TCL – Transaction Control Language

These commands handle **transactions** to ensure data consistency.

Common TCL Commands:

- **COMMIT** – Saves all changes

- **ROLLBACK** – Reverts to the last save point

- **SAVEPOINT** – Sets a save point within a transaction

Example:

BEGIN;

UPDATE Employees SET Name = 'Jane' WHERE ID = 1;

ROLLBACK;

5. DCL – Data Control Language

Used to **control access** to data in the database.

Common DCL Commands:

- **GRANT** – Gives user access

- **REVOKE** – Removes user access

Example:

GRANT SELECT ON Employees TO user_name;