

DDL

3 Data Definition Language (DDL) — Used to define the structure of the database

Commands:

Command	Purpose
CREATE	Creates objects like <u>tables</u> , <u>indexes</u> , <u>views</u> , etc.
ALTER	Modifies the structure of an existing object
DROP	Deletes an object
TRUNCATE	Removes all records from a table (faster than DELETE)
RENAME	Renames an object (varies by DBMS)

Remember:

one database → multiple tables → Each table has columns and rows

DDL - used to define the structure of the database.

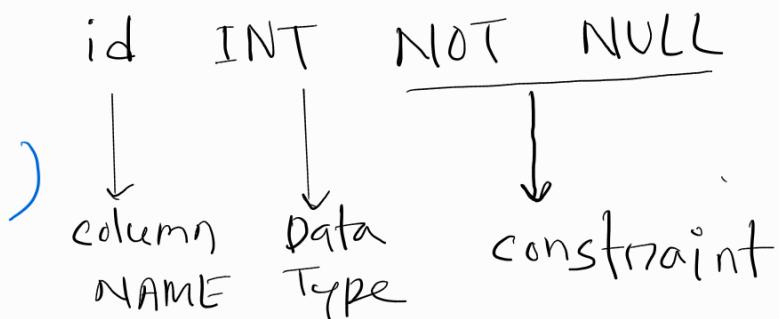
What DDL Creates:

- Table structure (columns, data types)
- Constraints (rules for data)
- Relationships (foreign keys)
- Indexes (for performance)

The actual data (rows) is added later using DML (Data Manipulation Language) like INSERT statements.

Example :

CREATE TABLE persons (



```
1  CREATE TABLE Persons
2  id INT NOT NULL,
3  Person_name VARCHAR(50) NOT NULL,
4  Birth_date DATE,
5  Phone VARCHAR(15) NOT NULL,
6  CONSTRAINT pk_persons PRIMARY KEY(id)
7 )
8
9
10 --add new column
11 -- THE NEW COLUMN ARE APPENDED AT THE END OF TABLE BY DEFAULT
12 -- YOU CANT ADD THIS COLUMN IN THE FRONT OR IN THE MIDDLE
13 --ALTER TABLE Persons
14 ADD email VARCHAR(50) NOT NULL
15
16
17 --REMOVE A COLUMN CALLED Phone
18 --ALTER TABLE Persons
19 DROP COLUMN Phone
20
21
22 --DELETE THE TABLE Persons FROM THE DATABASE
23 DROP TABLE Persons
24 SELECT * FROM persons
```

A red annotation on the right side of the code editor says "add multiple column" with a curly brace grouping the ALTER TABLE and ADD commands.

