

# 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.

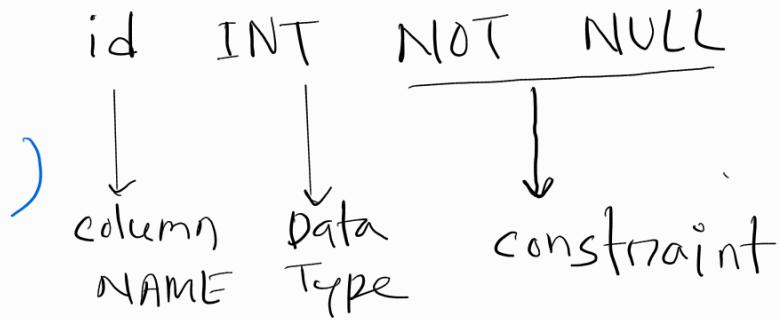
## What DDL Creates:

- 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
```

add multiple column

