DDL

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

Commands:

Command	Purpose
`CREATE`	*Creates objects like tables, indexes, views, 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 (

id INT NOT NULL

)

id → column NAME

INT → Data Type

NOT NULL → constraint

```sql
CREATE TABLE Persons(
id INT NOT NULL,
Person_name VARCHAR(50) NOT NULL,
Birth_date DATE,
Phone VARCHAR(15) NOT NULL,
CONSTRAINT pk_persons PRIMARY KEY(id)
)


--add new column
-- THE NEW COLUMN ARE APPENDED AT THE END OF TABLE BY DEFAULT
-- YOU CANT ADD THIS COLUMN IN THE FRONT OR IN THE MIDDLE
ALTER TABLE Persons
ADD email VARCHAR(50) NOT NULL


--REMOVE A COLUMN CALLED Phone
ALTER TABLE Persons
DROP COLUMN Phone


--DELETE THE TABLE Persons FROM THE DATABASE
DROP TABLE Persons
SELECT * FROM persons
```

add multiple column