DDL (Data Definition Language)

1. Definition

DDL (Data Definition Language) is a subset of SQL used to **define, create, and manage the structure of database objects**.

DDL commands work on the **schema (structure)** of the database, not on the actual data stored inside it.

Key Characteristics of DDL:

- Defines *how* data is stored
- Works on database objects like tables and databases
- Changes are usually **auto-committed**
- Does not insert, update, or delete records

2. CREATE Command

Purpose

The **CREATE** command is used to **create new database objects**.

Objects That Can Be Created:

- Database
- Table
- View
- Index

Important Points:

- CREATE only defines the **structure**
- No data is added when using CREATE
- Table columns and their data types are decided here

General Syntax

```
CREATE TABLE table_name (
  column_name datatype,
  column_name datatype
);
```

3. Detailed Example (For Revision)

Scenario: Student Management System

We want to store basic information about students in a college database.

SQL Command

```
CREATE TABLE students (
  student_id INT,
  name VARCHAR(50),
  age INT,
  course VARCHAR(30)
);
```

Column Explanation

- student_id INT
  Stores unique numeric ID for each student
- name VARCHAR(50)
  Stores student name (up to 50 characters)
- age INT
  Stores student age
- course VARCHAR(30)
  Stores course name enrolled by the student

What Happens After Execution:

- Table **students** is created in the database
- Table structure is fixed
- Table is **empty** (no records yet)

Concept to Remember

CREATE = Designing the table structure before storing data

Data insertion will be done later using **DML commands** like INSERT.

Quick Revision Note

- CREATE → builds database objects
- Works on structure, not data