**🔹 1. CREATE TABLE**

**Purpose:** Used to create a new table in the database.

**Basic Syntax:**

CREATE TABLE table\_name (

column1 datatype,

column2 datatype,

...

);

**Example:**

CREATE TABLE Students (

StudentID INT PRIMARY KEY,

Name VARCHAR(100),

Age INT,

Class VARCHAR(10)

);

**🔹 2. ALTER TABLE**

**Purpose:** Used to modify an existing table structure.

**Common Uses & Examples:**

* **Add a Column:**

ALTER TABLE Students

ADD Email VARCHAR(100);

* **Modify a Column:**

ALTER TABLE Students

MODIFY Age SMALLINT;

* **Drop a Column:**

ALTER TABLE Students

DROP COLUMN Class;

**🔹 3. TRUNCATE TABLE**

**Purpose:** Removes all rows from a table without logging individual row deletions. **Cannot be rolled back** in some DBMS.

**Syntax:**

TRUNCATE TABLE table\_name;

**Example:**

TRUNCATE TABLE Students;

**🔹 4. DROP TABLE**

**Purpose:** Deletes the entire table structure and data permanently.

**Syntax:**

DROP TABLE table\_name;

**Example:**

DROP TABLE Students;

**🔹 5. INSERT INTO (Insert Table)**

**Purpose:** Adds new rows to a table.

**Syntax:**

INSERT INTO table\_name (column1, column2, ...)

VALUES (value1, value2, ...);

**Example:**

INSERT INTO Students (StudentID, Name, Age, Class)

VALUES (1, 'Ali', 18, '10-A');

**🔹 6. UPDATE Table**

**Purpose:** Updates existing records in a table.

**Syntax:**

UPDATE table\_name

SET column1 = value1, column2 = value2

WHERE condition;

**Example:**

UPDATE Students

SET Age = 19

WHERE StudentID = 1;

**🔹 7. DELETE FROM Table**

**Purpose:** Deletes specific rows based on a condition.

**Syntax:**

DELETE FROM table\_name

WHERE condition;

**Example:**

DELETE FROM Students

WHERE Age < 18;

🔸 **Note:**

* DELETE can be rolled back (if within a transaction).
* TRUNCATE is faster but cannot delete specific rows and is less flexible.