**1. Creating a Database**

**Syntax:**

CREATE DATABASE database\_name;

**Example:**

CREATE DATABASE studentDB;

* This creates a database named studentDB.

**2. Using a Database**

Once a database is created, you need to select it before creating tables or inserting data.

**Syntax:**

USE database\_name;

**Example:**

USE studentDB;

* This selects the studentDB database for further operations.

**3. Dropping (Deleting) a Database**

**Syntax:**

DROP DATABASE database\_name;

**Example:**

DROP DATABASE studentDB;

* This command deletes the studentDB database permanently. **Be careful when using this** as all tables and data will be lost.

**4. Creating a Table**

Once the database is selected, you can create a table.

**Syntax:**

CREATE TABLE table\_name (

column1 datatype constraints,

column2 datatype constraints,

...

);

**Example:**

CREATE TABLE student (

id INT PRIMARY KEY,

name VARCHAR(100),

city VARCHAR(50),

number BIGINT

);

* This creates a table student with four columns: id, name, city, and number.

**5. Describing a Table Structure**

The DESC or DESCRIBE command shows the structure of a table, including columns and data types.

**Syntax:**

DESC table\_name;

**Example:**

DESC student;

* This will display the structure of the student table.

**6. Inserting Data into a Table**

**Syntax:**

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

VALUES (value1, value2, ...);

**Example (Single Row):**

INSERT INTO student (id, name, city, number)

VALUES (101, 'Amarjeet Kumar Singh', 'Bangalore', 6261535069);

**7. Selecting (Querying) Data from a Table**

**Syntax:**

SELECT column1, column2, ...

FROM table\_name

WHERE condition; -- Optional

**Example (Select All Data):**

SELECT \* FROM student;

* This retrieves all the columns for every row in the student table.

**Example (Select Specific Columns):**

SELECT name, city FROM student;

* This retrieves only the name and city columns from the student table.

**Example (Select with Condition):**

SELECT \* FROM student WHERE city = 'Bangalore';

* This retrieves rows where the city is Bangalore.

**8. Dropping a Table**

If you need to delete a table, use the DROP TABLE command.

**Syntax:**

DROP TABLE table\_name;

**Example:**

DROP TABLE student;

* This deletes the student table permanently, along with all its data.