**Lewis Mutugi**

**Week 6 Assignment**

1. **CREATE TABLE**

The CREATE TABLE statement is used to define a new table in a MySQL database. It allows the user to specify the table name, column names and data types. For example:

CREATE TABLE students

(

student\_id INT PRIMARY KEY,

first\_name VARCHAR(30),

last\_name VARCHAR(30),

age INT

);

This query creates a table named "students" with columns for student ID, first name, last name, and age. The student ID column is defined as an integer primary key.

1. **DROP TABLE**

The DROP TABLE statement is used to remove or delete an existing table from the database permanently. Any data stored in the table will no longer be accessible after it has been dropped. For example:

DROP TABLE employees;

This statement will remove the "employees" table and its contents from the database.

1. **ALTER TABLE**
2. The primary purpose of the ALTER TABLE statement in MySQL is to modify the structure of an existing table, such as adding, deleting or modifying columns.
3. ALTER TABLE customers ADD email VARCHAR(255);

This query uses the ALTER TABLE statement to add a new column named "email" as a varchar data type with a maximum length of 255 characters to the "customers" table.

1. ALTER TABLE customers MODIFY phone\_number VARCHAR(15);

This extends the previous query to modify the data type of the existing "phone\_number" column in the "customers" table from its original data type to a varchar with a maximum length of 15 characters. The ALTER TABLE statement allows modifying existing table schemas without dropping and recreating the table.