```sql
#DDL 4 operations 1.create, alter, drop, truncate
#DML select, insert, update, delete

# first lab work
#activity to design a university management system using ddl commands (create, alter, and drop) in mysql.

CREATE DATABASE UniversityDB;
USE UniversityDB;

CREATE TABLE Departments (
    DeptID INT PRIMARY KEY AUTO_INCREMENT,
    DeptName VARCHAR(100) NOT NULL
);


#professors tabel

CREATE TABLE Professors (
    ProfID INT PRIMARY KEY AUTO_INCREMENT,
    ProfName VARCHAR(100) NOT NULL,
    DeptID INT,
    Salary DECIMAL(10,2),
    FOREIGN KEY (DeptID) REFERENCES Departments(DeptID)
);

 #courses tabel

CREATE TABLE Courses (
    CourseID INT PRIMARY KEY AUTO_INCREMENT,
    CourseName VARCHAR(100) NOT NULL,
    DeptID INT,
    FOREIGN KEY (DeptID) REFERENCES Departments(DeptID)
);
 #students tabel

CREATE TABLE Students (
    StudentID INT PRIMARY KEY AUTO_INCREMENT,
    StudentName VARCHAR(100) NOT NULL,
    Age INT,
    DeptID INT,
    FOREIGN KEY (DeptID) REFERENCES Departments(DeptID)
);

 #Enrollments Table (relationship between Students & Courses)
```

```sql
CREATE TABLE Enrollments (
    EnrollID INT PRIMARY KEY AUTO_INCREMENT,
    StudentID INT,
    CourseID INT,
    FOREIGN KEY (StudentID) REFERENCES Students(StudentID),
    FOREIGN KEY (CourseID) REFERENCES Courses(CourseID)
);


#Alter commands
#Add a new column PhoneNumber to Students

ALTER TABLE Students
ADD PhoneNumber VARCHAR(15);

# Modify CourseName in Courses to allow up to 150 characters
ALTER TABLE Courses
MODIFY CourseName VARCHAR(150);

#Remove Salary column from Professors
ALTER TABLE Professors
DROP COLUMN Salary;

```

```
68
69      #DROP Example (Remove Enrollments table)
70 •    DROP TABLE Enrollments;
71
72 •    INSERT INTO Departments (DeptName) VALUES
73      ('Computer Science'),
74      ('Mathematics'),
75      ('Physics'),
76      ('Chemistry'),
77      ('Biology');
78
79 •    INSERT INTO Students (StudentName, Age, DeptID, PhoneNumber) VALUES
80      ('Rahul Sharma', 20, 1, '9876543210'),
81      ('Priya Mehta', 21, 2, '9123456780'),
82      ('Amit Kumar', 19, 1, '9988776655'),
83      ('Neha Singh', 22, 3, '9001122334'),
84      ('Suresh Rao', 20, 2, '8899776655');
85
86 •    SELECT *
87      FROM Students;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

StudentID	StudentName	Age	DeptID	PhoneNumber
11	Rahul Sharma	20	1	9876543210
12	Priya Mehta	21	2	9123456780
13	Amit Kumar	19	1	9988776655
14	Neha Singh	22	3	9001122334
15	Suresh Rao	20	2	8899776655
NULL	NULL	NULL	NULL	NULL