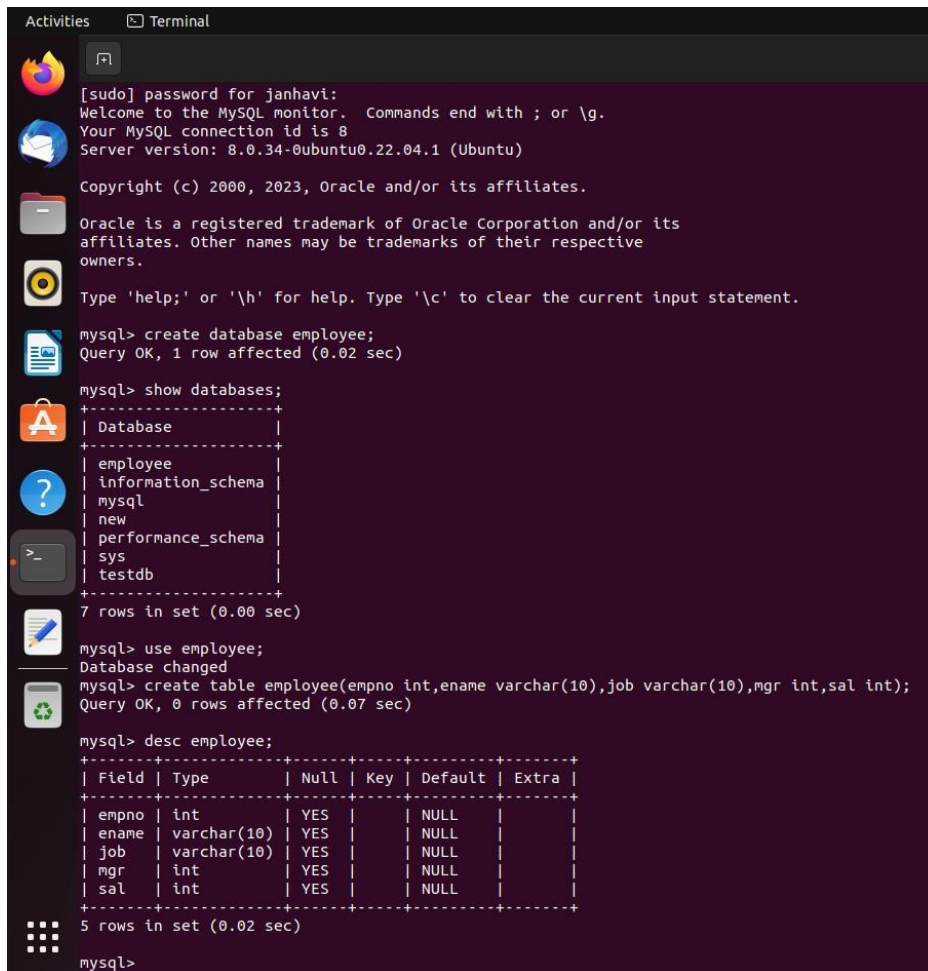# PRACTICAL NO. 2

1. **Create a table called Employee with following structure.**

Create Table:

SQL> create table employee(empno int,ename varchar(10),job varchar(10),mgr int,sal int);

SQL> desc employee;

a. **Add a column commission with domain to the Employee table.**
   SQL> alter table employee add(commission int);
   SQL> desc employee;

```
mysql> alter table employee add(commission int);
Query OK, 0 rows affected (0.07 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc employee;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| empno      | int         | YES  |     | NULL    |       |
| ename      | varchar(10) | YES  |     | NULL    |       |
| job        | varchar(10) | YES  |     | NULL    |       |
| mgr        | int         | YES  |     | NULL    |       |
| sal        | int         | YES  |     | NULL    |       |
| commission | int         | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)

mysql>
```

b. Insert any Five records into the table.

SQL> insert into employee values(101,'Janhavi','CEO',1234,100000,'70');
SQL> insert into employee values(102,'Siddharth','Vice-CEO',2345,90000,'65');
SQL> insert into employee values(103,'Jayesh','Manager', 3456,85000,'65');
SQL> insert into employee values(104,'Ramesh','Co-Manager', 4567,87000,'55');
SQL> insert into employee values(105,'Abhishek','Jr-Manager', 5678,83000,'50');
SQL> select *from employee;

```
mysql> insert into employee values(101,'Janhavi','CEO',1234,100000,'70');
Query OK, 1 row affected (0.03 sec)

mysql> insert into employee values(102,'Siddharth','Vice-CEO',2345,90000,'65');
Query OK, 1 row affected (0.03 sec)

mysql> insert into employee values(103,'Jayesh','Manager',3456,85000,'65');
Query OK, 1 row affected (0.04 sec)

mysql> insert into employee values(104,'Ramesh','Co-Manager',4567,87000,'55');
Query OK, 1 row affected (0.02 sec)

mysql> insert into employee values(105,'Abhishek','Jr-Manager',5678,83000,'50');
Query OK, 1 row affected (0.03 sec)

mysql> select *from employee;
+-------+----------+------------+------+--------+------------+
| empno | ename    | job        | mgr  | sal    | commission |
+-------+----------+------------+------+--------+------------+
|   101 | Janhavi  | CEO        | 1234 | 100000 |         70 |
|   102 | Siddharth | Vice-CEO  | 2345 |  90000 |         65 |
|   103 | Jayesh   | Manager    | 3456 |  85000 |         65 |
|   104 | Ramesh   | Co-Manager | 4567 |  87000 |         55 |
|   105 | Abhishek | Jr-Manager | 5678 |  83000 |         50 |
+-------+----------+------------+------+--------+------------+
5 rows in set (0.00 sec)

mysql>
```
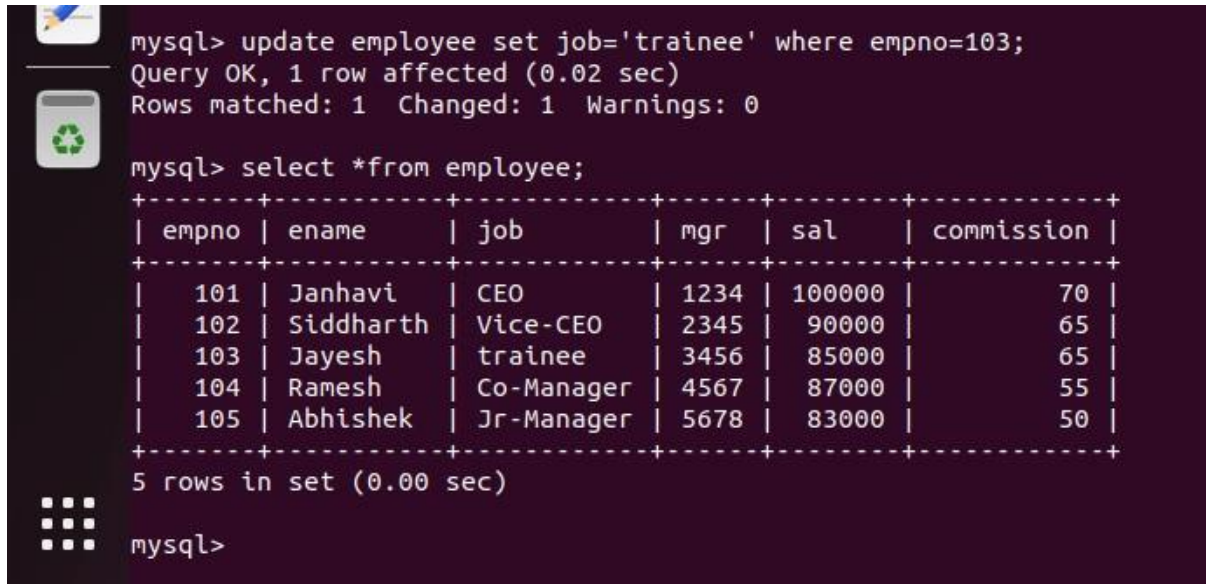
c. Update the column details of job.

SQL> update employee set job='trainee' where empno=103;
SQL> select *from employee;

```
mysql> update employee set job='trainee' where empno=103;
Query OK, 1 row affected (0.02 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select *from employee;
+--------+----------+------------+------+--------+------------+
| empno  | ename    | job        | mgr  | sal    | commission |
+--------+----------+------------+------+--------+------------+
|    101 | Janhavi  | CEO        | 1234 | 100000 |         70 |
|    102 | Siddharth| Vice-CEO   | 2345 |  90000 |         65 |
|    103 | Jayesh   | trainee    | 3456 |  85000 |         65 |
|    104 | Ramesh   | Co-Manager | 4567 |  87000 |         55 |
|    105 | Abhishek | Jr-Manager | 5678 |  83000 |         50 |
+--------+----------+------------+------+--------+------------+
5 rows in set (0.00 sec)

mysql>
```
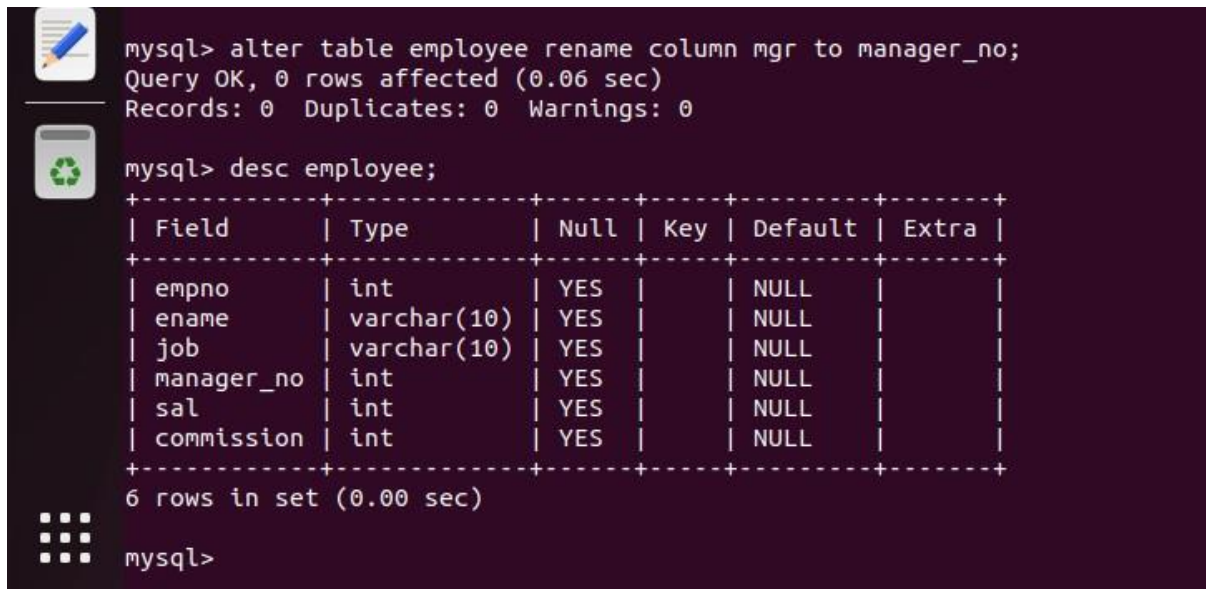
d. Rename the column of Employee table using alter command.

SQL> alter table employee rename column mgr to manager_no;
SQL> desc employee;

```
mysql> alter table employee rename column mgr to manager_no;
Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc employee;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| empno      | int         | YES  |     | NULL    |       |
| ename      | varchar(10) | YES  |     | NULL    |       |
| job        | varchar(10) | YES  |     | NULL    |       |
| manager_no | int         | YES  |     | NULL    |       |
| sal        | int         | YES  |     | NULL    |       |
| commission | int         | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)

mysql>
```

e. Delete the employee whose Empno is 105.

SQL> delete from employee where empno=105;
SQL> select *from employee;

```
mysql> delete from employee where empno=105;
Query OK, 1 row affected (0.02 sec)

mysql> select *from employee;
+-------+-----------+------------+------------+--------+------------+
| empno | ename     | job        | manager_no | sal    | commission |
+-------+-----------+------------+------------+--------+------------+
|   101 | Janhavi   | CEO        |       1234 | 100000 |         70 |
|   102 | Siddharth | Vice-CEO   |       2345 |  90000 |         65 |
|   103 | Jayesh    | trainee    |       3456 |  85000 |         65 |
|   104 | Ramesh    | Co-Manager |       4567 |  87000 |         55 |
+-------+-----------+------------+------------+--------+------------+
4 rows in set (0.00 sec)

mysql>
```

2. Create department table with following structure.

SQL> create table department(deptno int,deptname varchar(10),location varchar(10));

SQL> desc department;

```
mysql> use department;
Database changed
mysql> create table department(deptno int,deptname varchar(10),location varchar(10));
Query OK, 0 rows affected (0.07 sec)

mysql> desc department;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| deptno   | int         | YES  |     | NULL    |       |
| deptname | varchar(10) | YES  |     | NULL    |       |
| location | varchar(10) | YES  |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```
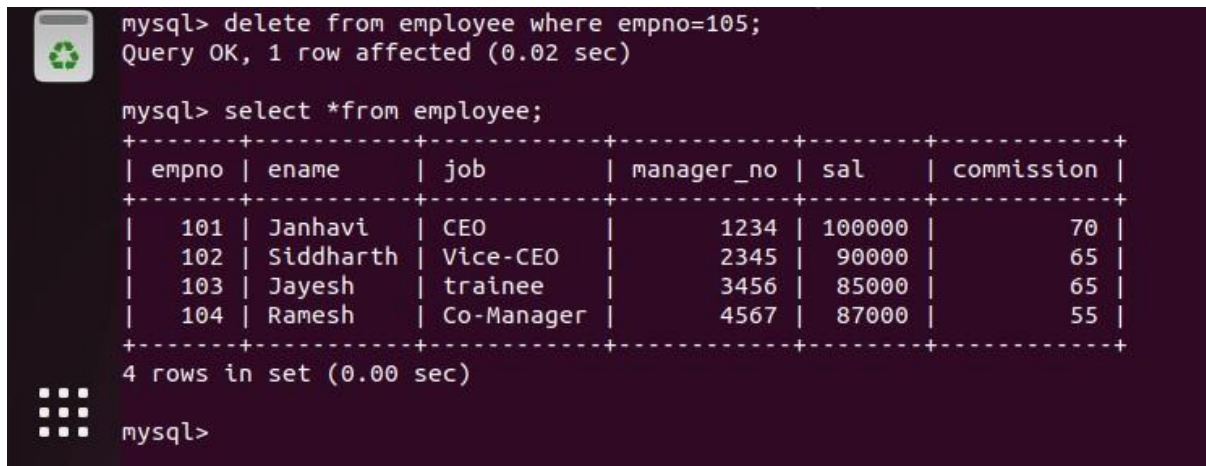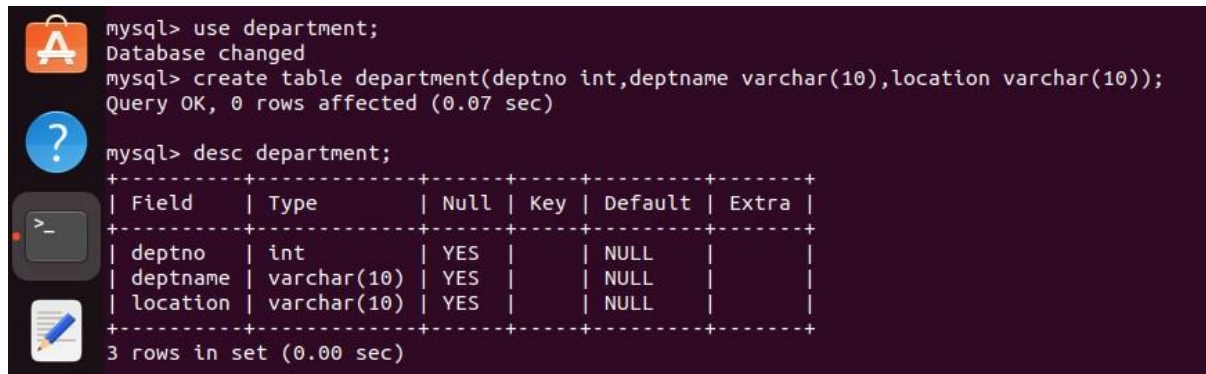
a. Add a column designation to the Department table.
SQL> alter table department add(designation varchar(10));
SQL> desc employee;

```
mysql> alter table department add(designation varchar(10));
Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc department;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| deptno      | int         | YES  |     | NULL    |       |
| deptname    | varchar(10) | YES  |     | NULL    |       |
| location    | varchar(10) | YES  |     | NULL    |       |
| designation | varchar(10) | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
4 rows in set (0.01 sec)

mysql>
```

b. Insert values into the table.

SQL> insert into department values(9,'Accounting','Mumbai','Manager');
SQL> insert into department values(10,'Research','Pune','Professor');
SQL> insert into department values(11,'Sales','Banglore','Salesman');
SQL> insert into department values(12,'Operations','Hyderabad','Operator');
SQL> insert into department values(13,'Accounting','Chennai','Manager');
SQL> select *from department;

```
mysql> insert into department values(9,'Accounting','Mumbai','Manager');
Query OK, 1 row affected (0.04 sec)

mysql> insert into department values(10,'Research','Pune','Professor');
Query OK, 1 row affected (0.03 sec)

mysql> insert into department values(11,'Sales','Banglore','Salesman');
Query OK, 1 row affected (0.03 sec)

mysql> insert into department values(12,'Operations','Hyderabad','Operator')
Query OK, 1 row affected (0.02 sec)

mysql> insert into department values(9,'Accounting','Chennai','Manager');
Query OK, 1 row affected (0.03 sec)

mysql> select *from department;
+--------+------------+-----------+-------------+
| deptno | deptname   | location  | designation |
+--------+------------+-----------+-------------+
|      9 | Accounting | Mumbai    | Manager     |
|     10 | Research   | Pune      | Professor   |
|     11 | Sales      | Banglore  | Salesman    |
|     12 | Operations | Hyderabad | Operator    |
|      9 | Accounting | Chennai   | Manager     |
+--------+------------+-----------+-------------+
5 rows in set (0.00 sec)
```

c. List the records of dept table grouped by deptno.

SQL> select deptno,deptname from department group by deptno,deptname;

```
mysql> select deptno,deptname from department group by deptno,deptname;
+--------+------------+
| deptno | deptname   |
+--------+------------+
|      9 | Accounting |
|     10 | Research   |
|     11 | Sales      |
|     12 | Operations |
+--------+------------+
4 rows in set (0.00 sec)

mysql>
```

d. Update the record where deptno is 9.

SQL> update department set designation='Accountant' where deptno=9;

SQL> select *from department;

```
mysql> update department set designation='Accountant' where deptno=9;
Query OK, 2 rows affected (0.02 sec)
Rows matched: 2  Changed: 2  Warnings: 0

mysql> select *from department;
+--------+------------+-----------+-------------+
| deptno | deptname   | location  | designation |
+--------+------------+-----------+-------------+
|      9 | Accounting | Mumbai    | Accountant  |
|     10 | Research   | Pune      | Professor   |
|     11 | Sales      | Banglore  | Salesman    |
|     12 | Operations | Hyderabad | Operator    |
|      9 | Accounting | Chennai   | Accountant  |
+--------+------------+-----------+-------------+
5 rows in set (0.00 sec)

mysql>
```

e. Delete any column data from the table.

SQL> alter table department drop(designation);

SQL> select *from department;

```
mysql> alter table department drop column designation;
Query OK, 0 rows affected (0.08 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> select *from department;
+--------+------------+-----------+
| deptno | deptname   | location  |
+--------+------------+-----------+
|      9 | Accounting | Mumbai    |
|     10 | Research   | Pune      |
|     11 | Sales      | Banglore  |
|     12 | Operations | Hyderabad |
|      9 | Accounting | Chennai   |
+--------+------------+-----------+
5 rows in set (0.00 sec)

mysql>
```