SQL Assignment MODULE 4

1. Statement to create the Contact table.

```
Create TABLE Contact (
ContactId int primary key
CompanyId int,
FirstName varchar(45),
LastName varchar(45),
Street varchar(45),
City varchar (45),
State varchar(2),
Zip varchar(10),
IsMain Boolean,
Email varchar(45),
Phone varchar(12)
);
```

2.Statement to create the Employee table

```
    Create table Employee (
    Employeeid int,
    FirstName varchar(45),
    LastName varchar(45),
    Salary decimal(10,2),
    Hiredate date,
    Jobtitle varchar(45),
    Email varchar(50),
    Phone varchar(20)
    );
```

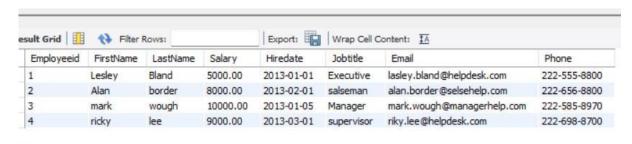
3. Statement to create the Contact Employee table

```
Create Table ConatctEmployee (
   ContactEmployeeid int primary key,
   ContactId int,
   Employeeid int ,
   Contactdate date,
   Description varchar(100)
);
```

4.In the Employee table, the statement that changes Lesley Bland's phone number to 215-555-8800

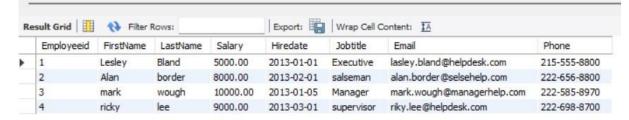
→ Before

80 • select * from employee;



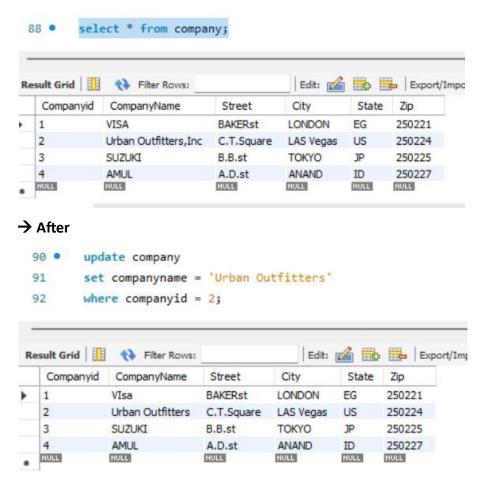
→ After





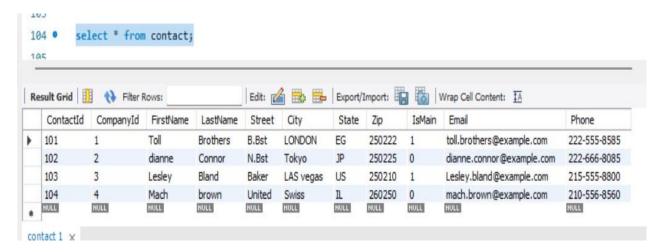
5.In the Company table, the statement that changes the name of "Urban Outfitters, Inc." to "Urban Outfitters".

→ Before

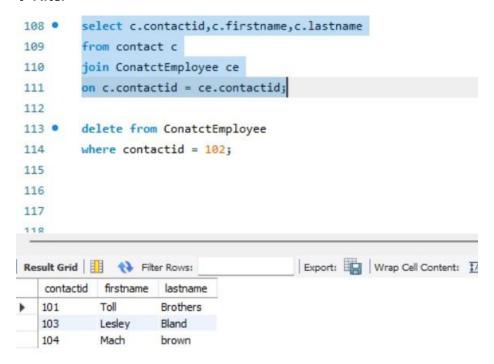


6.In ContactEmployee table, the statement that removes Dianne Connor's contact event with Jack Lee (one statement).

→ Before



→ After



7. Write the SQL SELECT query that displays the names of the employees that have contacted Toll Brothers (one statement). Run the SQL SELECT query in MySQL Workbench. Copy the results below as well.

```
96 •
         select e.firstname, e.lastname
         from employee e
 97
         join ConatctEmployee ce
 98
         on e.employeeid = ce.employeeid
 99
100
         join contact c
         on ce.contactid = c.contactid
101
         where c.firstname = 'toll' and c.lastname = 'brothers';
102
103
104
                                          Export: Wrap Cell Content: TA
Result Grid
             Filter Rows:
            lastname
   firstname
Lesley
            Bland
```

- 8. What is the significance of "%" and "_" operators in the LIKE statement?
- → In SQL LIKE->
 - '%' Matches zero or more characters (e.g. 'A%' matches any string that starts with 'A', (e.g. "Apple", "Anna")
 - '_' Matches exactly one character (e.g. 'J_n' matches any three letter string starting with 'J' and ending 'N' .
- 9. Explain normalization in the context of databases.
- → Normalization in database is the process of organizing data in database to reduce redundancy and improve data integrity by dividing database into multiple related tables. It reduces redundancy, improves Consistency and Prevents Anomalies.

- 10.What does a join in MySQL mean?
- → In MySQL a Join combines rows from multiple tables based on a related column. Join enabling you to combine and analyze related data efficiently.
- 11. What do you understand about DDL, DCL, and DML in MySQL?
- → These are the categories of SQL statements.
 - DDL (**Data Definition Language**) :- It defines and modifies the structure of database objects. (e.g. CREATE, ALTER, DROP)
 - → Changes are permanent and affects the database schema
 - DML (**Data Manipulation Language**) :- It manages the data within tables. (e.g. SELECT, INSERT, UPDATE, DELETE)
- →Operates on table contents, not structure
 - DCL (**Data Control Language**) :- It controls access and permissions for database users. (e.g. GRANT, REVOKE)
 - → Manages security.

- 12) What is the role of the MySQL JOIN clause in a query, and what are some common types of joins?
- → Role of MySQL JOIN clause in a query is it joins tables based on common column, and help to retrieve data from multiple table in a single query by linking them through specific conditions.
- → These are the common types of joins.
 - INNER JOIN()
 - LEFT JOIN()
 - RIGHT JOIN
 - FULL JOIN
 - CROSS JOIN