**Experiment 1.1**

**Student Name:** Khushal Grover **UID:** 22MCC20040

**Branch:** MCA CC and Devops **Section/Group:** 1/B

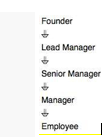
**Semester:** 1 **Date of Performance:**27-09-2022

**Subject Name:** Advanced Database Management

System. **Subject Code:** 22CAP-647

1. **Aim/Overview of the practical:**

Amber's conglomerate corporation just acquired some new companies. Each of the companies follows this hierarchy:



Given the table schemas below, write a query to print the company\_code, founder name, total number of lead managers, total number of senior managers, total number of managers, and total number of employees. Order your output by ascending company\_code.

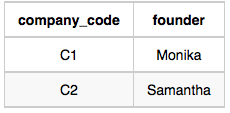
**Note:**

The tables may contain duplicate records.

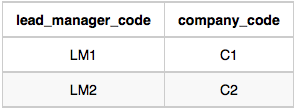
The company\_code is string, so the sorting should not be numeric. For example, if the company\_codes are C\_1, C\_2, and C\_10, then the ascending company\_codes will be C\_1, C\_2, and C\_10.

**Sample Input**

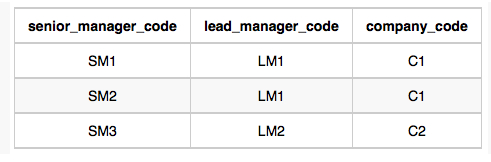
Company Table:



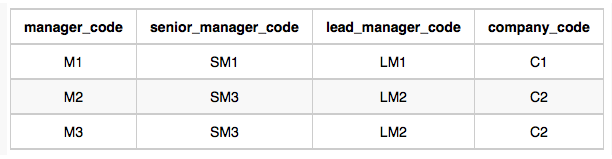
Lead\_Manager Table:



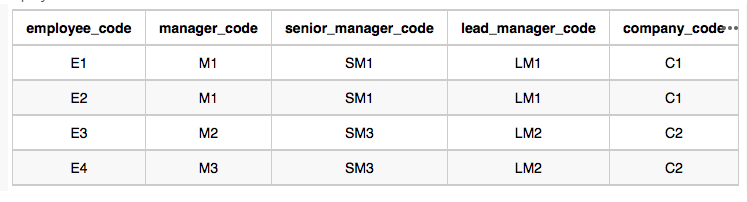
Senior\_Manager Table:



Manager Table:



Employee Table:



**Sample Output**

C1 Monika 1 2 1 2

C2 Samantha 1 1 2 2

1. **Code for experiment/practical:**
   1. **For Creating tables :**

create table Company(company\_code varchar(10), founder varchar(30));

insert into Company values('C1', 'Neel');

insert into Company values('C2', 'Nitin');

insert into Company values('C3', 'Mukesh');

create table Lead\_Manager(lead\_manager\_code varchar(10), company\_code varchar(10));

insert into Lead\_Manager values('LM1', 'C1');

insert into Lead\_Manager values('LM2', 'C2');

insert into Lead\_Manager values('LM3', 'C3');

insert into Lead\_Manager values('LM4', 'C3');

create table Senior\_Manager(senior\_manager\_code varchar(10), lead\_manager\_code varchar(10), company\_code varchar(10));

insert into Senior\_Manager values('SM1', 'LM1', 'C1');

insert into Senior\_Manager values('SM2', 'LM1', 'C1');

insert into Senior\_Manager values('SM3', 'LM2', 'C2');

insert into Senior\_Manager values('SM4', 'LM3', 'C3');

insert into Senior\_Manager values('SM5', 'LM3', 'C3');

create table Manager(manager\_code varchar(10), senior\_manager\_code varchar(10), lead\_manager\_code varchar(10), company\_code varchar(10));

insert into Manager values('M1', 'SM1', 'LM1', 'C1');

insert into Manager values('M2', 'SM2', 'LM1', 'C1');

insert into Manager values('M3', 'SM3', 'LM2', 'C2');

insert into Manager values('M4', 'SM3', 'LM2', 'C2');

insert into Manager values('M6', 'SM5', 'LM3', 'C3');

create table Employee(employee\_code varchar(10), manager\_code varchar(10), senior\_manager\_code varchar(10), lead\_manager\_code varchar(10), company\_code varchar(10));

insert into Employee values('E1', 'M1', 'SM1', 'LM1', 'C1');

insert into Employee values('E2', 'M1', 'SM1', 'LM1', 'C1');

insert into Employee values('E3', 'M2', 'SM2', 'LM1', 'C1');

insert into Employee values('E4', 'M3', 'SM3', 'LM2', 'C2');

insert into Employee values('E6', 'M5', 'SM4', 'LM3', 'C3');

insert into Employee values('E7', 'M6', 'SM5', 'LM3', 'C3');

* 1. **Query to get desired output:**

select c.company\_code, c.founder,

count (distinct Lead\_Manager.lead\_manager\_code),

count (distinct senior\_manager.senior\_manager\_code),

count (distinct manager.manager\_code),

count (distinct employee.employee\_code)

from Company c

join Lead\_Manager on c.company\_code = Lead\_Manager.company\_code

join Senior\_manager on c.company\_code = senior\_manager.company\_code

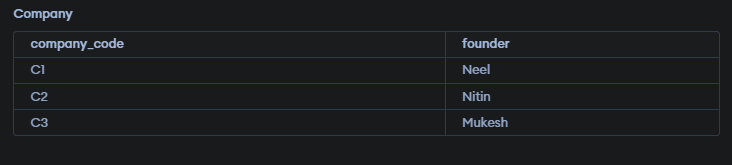
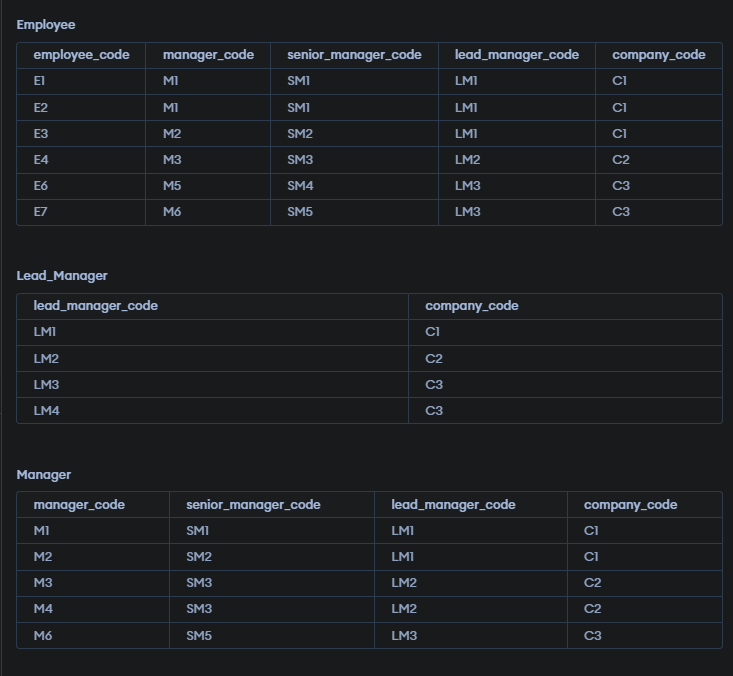
join manager on c.company\_code = manager.company\_code

join employee on c.company\_code = employee.company\_code

group by c.company\_code, c.founder

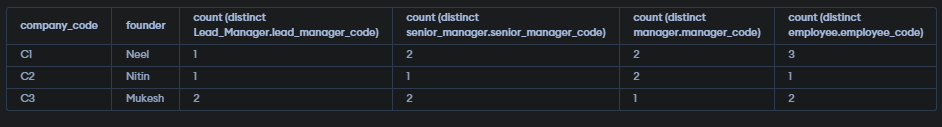
order by c.company\_code

1. **Output:**
   1. **Tables :**





* 1. **Query Result:**



**Learning outcomes :**

**1. Inner Join**

**2. SQL Queries**