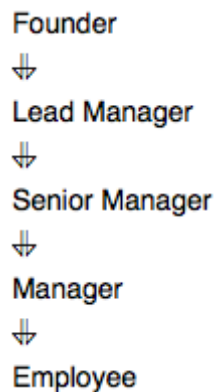


## Problem

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\_10, and C\_2.

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## Input Format

The following tables contain company data:

- Company: The `company_code` is the code of the company and founder is the founder

| Column       | Type   |
|--------------|--------|
| company_code | String |
| founder      | String |

of the company.

- Lead\_Manager: The lead\_manager\_code is the code of the lead manager, and the company\_code is the code of the working company.

| Column            | Type   |
|-------------------|--------|
| lead_manager_code | String |
| company_code      | String |

- Senior\_Manager: The senior\_manager\_code is the code of the senior manager, the lead\_manager\_code is the code of its lead manager, and the company\_code is the

| Column              | Type   |
|---------------------|--------|
| senior_manager_code | String |
| lead_manager_code   | String |
| company_code        | String |

code of the working company.

- Manager: The manager\_code is the code of the manager, the senior\_manager\_code is the code of its senior manager, the lead\_manager\_code is the code of its lead manager, and the company\_code is the code of the working company.

| Column              | Type   |
|---------------------|--------|
| manager_code        | String |
| senior_manager_code | String |
| lead_manager_code   | String |
| company_code        | String |

- Employee: The employee\_code is the code of the employee, the manager\_code is the code of its manager, the senior\_manager\_code is the code of its senior manager,

the lead\_manager\_code is the code of its lead manager, and the company\_code is

| Column              | Type   |
|---------------------|--------|
| employee_code       | String |
| manager_code        | String |
| senior_manager_code | String |
| lead_manager_code   | String |
| company_code        | String |

the code of the working company.

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Sample Input

| company_code | founder  |
|--------------|----------|
| C1           | Monika   |
| C2           | Samantha |

Company Table:

Lead\_Manager Table:

| lead_manager_code | company_code |
|-------------------|--------------|
| LM1               | C1           |
| LM2               | C2           |

Senior\_Manager Table:

| senior_manager_code | lead_manager_code | company_code |
|---------------------|-------------------|--------------|
| SM1                 | LM1               | C1           |
| SM2                 | LM1               | C1           |
| SM3                 | LM2               | C2           |

Manager Table:

| manager_code | senior_manager_code | lead_manager_code | company_code |
|--------------|---------------------|-------------------|--------------|
| M1           | SM1                 | LM1               | C1           |
| M2           | SM3                 | LM2               | C2           |
| M3           | SM3                 | LM2               | C2           |

Employee Table:

| employee_code | manager_code | senior_manager_code | lead_manager_code | company_code |
|---------------|--------------|---------------------|-------------------|--------------|
| E1            | M1           | SM1                 | LM1               | C1           |
| E2            | M1           | SM1                 | LM1               | C1           |
| E3            | M2           | SM3                 | LM2               | C2           |
| E4            | M3           | SM3                 | LM2               | C2           |

Sample Output

C1 Monika 1 2 1 2  
C2 Samantha 1 1 2 2

Explanation

In company C1, the only lead manager is LM1. There are two senior managers, SM1 and SM2, under LM1. There is one manager, M1, under senior manager SM1. There are two employees, E1 and E2, under manager M1.

In company C2, the only lead manager is LM2. There is one senior manager, SM3, under LM2. There are two managers, M2 and M3, under senior manager SM3. There is one employee, E3, under manager M2, and another employee, E4, under manager, M3.

### Solution

```
select c.company_code, c.founder, count(distinct l.lead_manager_code), count(distinct
s.senior_manager_code), count(distinct m.manager_code), count(distinct e.employee_code)
from Company as c join Lead_Manager as l on c.company_code = l.company_code join
Senior_Manager as s on l.lead_manager_code = s.lead_manager_code join Manager as m
on s.senior_manager_code = m.senior_manager_code join Employee as e on
```

```
m.manager_code = e.manager_code group by c.company_code, c.founder order by  
c.company_code;
```