

1

```
SQL> SELECT city, COUNT(DISTINCT department_id) AS num_departments
2 FROM locations
3 JOIN departments ON locations.location_id = departments.location_id
4* GROUP BY city;
```

CITY	NUM_DEPARTMENTS
Toronto	1
London	1
Munich	1
Southlake	1
South San Francisco	1
Seattle	21
Oxford	1

7 rows selected.

SQL> █

2

```
SQL> SELECT city, COUNT(department_id)
2 FROM locations
3 LEFT JOIN departments ON locations.location_id = departments.location_id
4* GROUP BY city;
```

CITY	COUNT(DEPARTMENT_ID)
Sao Paulo	0
Toronto	1
London	1
Munich	1
Sydney	0
Geneva	0
Stretford	0
Southlake	1
Singapore	0
Mexico City	0
Hiroshima	0
Bern	0
Bombay	0
Utrecht	0
Tokyo	0
South San Francisco	1
Beijing	0
Seattle	21
South Brunswick	0
Oxford	1
Roma	0
Venice	0
Whitehorse	0

23 rows selected.

SQL> █

3

```
SQL> SELECT city, COUNT(department_id) AS num_departments
  2 FROM locations
  3 JOIN departments ON locations.location_id = departments.location_id
  4 GROUP BY city
  5* HAVING COUNT(department_id) > 1;
```

CITY	NUM_DEPARTMENTS
Seattle	21

4

```
SQL> SELECT d.department_name, c.country_name, COUNT(e.employee_id) AS num_employees,
  2 SUM(e.salary) AS total_salary, AVG(e.salary) AS avg_salary
  3 FROM departments d
  4 JOIN locations l ON d.location_id = l.location_id
  5 JOIN countries c ON l.country_id = c.country_id
  6 JOIN employees e ON d.department_id = e.department_id
  7 GROUP BY d.department_name, c.country_name
  8* ORDER BY c.country_name ASC, AVG(e.salary) DESC;
```

DEPARTMENT_NAME	COUNTRY_NAME	NUM_EMPLOYEES	TOTAL_SALARY	AVG_SALARY
Marketing	Canada	2	19000	9500
Public Relations	Germany	1	10000	10000
Sales	United Kingdom	34	304500	8955,882352941176470588235294117647058824
Human Resources	United Kingdom	1	6500	6500
Executive	United States of America	3	58000	19333,3333333333333333333333333333333333
Accounting	United States of America	2	20308	10154
Finance	United States of America	6	51608	8601,3333333333333333333333333333333333
IT	United States of America	5	28800	5760
Administration	United States of America	1	4400	4400
Purchasing	United States of America	6	24900	4150
Shipping	United States of America	45	156400	3475,5555555555555555555555555555555556

11 rows selected.

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6

```
SQL> SELECT c.country_name AS pais, COUNT(e.employee_id) AS numero_dempleats
  2 FROM employees e
  3 JOIN departments d ON e.department_id = d.department_id
  4 JOIN locations l ON d.location_id = l.location_id
  5 JOIN countries c ON l.country_id = c.country_id
  6 GROUP BY c.country_name
  7 HAVING COUNT(e.employee_id) > 0
  8* ORDER BY c.country_name;
```

PAIS	NUMERO_DEMPLEATS
Canada	2
Germany	1
United Kingdom	35
United States of America	68

7

```
SQL> SELECT c.country_name AS pais, COUNT(e.employee_id) AS num_employees
  2 FROM countries c
  3 LEFT JOIN locations l ON c.country_id = l.country_id
  4 LEFT JOIN departments d ON l.location_id = d.location_id
  5 LEFT JOIN employees e ON d.department_id = e.department_id
  6 GROUP BY c.country_name
  7* ORDER BY c.country_name;
```

PAIS	NUM_EMPLOYEES
Argentina	0
Australia	0
Belgium	0
Brazil	0
Canada	2
China	0
Denmark	0
Egypt	0
France	0
Germany	1
India	0
Israel	0
Italy	0
Japan	0
Kuwait	0
Malaysia	0
Mexico	0
Netherlands	0
Nigeria	0
Singapore	0
Switzerland	0
United Kingdom	35
United States of America	68
Zambia	0

8

9

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