580. Count Student Number in Departments

Medium   Topics   Companies   Hint

SQL Schema >   Pandas Schema >

Table: Student

```
+--------------+---------+
| Column Name  | Type    |
+--------------+---------+
| student_id   | int     |
| student_name | varchar |
| gender       | varchar |
| dept_id      | int     |
+--------------+---------+
```
student_id is the primary key (column with unique values) for this table.
dept_id is a foreign key (reference column) to dept_id in the Department tables.
Each row of this table indicates the name of a student, their gender, and the id of
their department.

Table: Department

```
+--------------+---------+
| Column Name  | Type    |
+--------------+---------+
| dept_id      | int     |
| dept_name    | varchar |
+--------------+---------+
```
dept_id is the primary key (column with unique values) for this table.
Each row of this table contains the id and the name of a department.

Write a solution to report the respective department name and number of students majoring in each department for all departments in the `Department` table (even ones with no current students).

Return the result table **ordered by** `student_number` **in descending order**. In case of a tie, order them by `dept_name` **alphabetically**.

The result format is in the following example.

Example 1:

```
Input:
Student table:
+------------+--------------+--------+---------+
| student_id | student_name | gender | dept_id |
+------------+--------------+--------+---------+
| 1          | Jack         | M      | 1       |
| 2          | Jane         | F      | 1       |
| 3          | Mark         | M      | 2       |
+------------+--------------+--------+---------+
Department table:
+---------+-------------+
| dept_id | dept_name   |
+---------+-------------+
| 1       | Engineering |
| 2       | Science     |
| 3       | Law         |
+---------+-------------+
Output:
+-------------+----------------+
| dept_name   | student_number |
+-------------+----------------+
| Engineering | 2              |
| Science     | 1              |
| Law         | 0              |
+-------------+----------------+
```

Seen this question in a real interview before?   1/5

Yes   No

Accepted **70.2K** | Submissions **118.2K** | Acceptance Rate **59.3%**

🏷 Topics ^

Database

🏢 Companies ^

0 - 6 months

X 2

💡 Hint 1 ^

Still remember the difference between 'INNER JOIN' and 'OUTTER JOIN' in SQL?

💡 Hint 2

Do you know other expressions using the 'COUNT' function besides 'COUNT(*)'?

💬 Discussion (6) ⌄