

Problem 580: Count Student Number in Departments

Problem Information

Difficulty: Medium

Acceptance Rate: 59.88%

Paid Only: Yes

Tags: Database

Problem Description

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 |
+-----+-----+

```

Code Snippets

MySQL:

```
# Write your MySQL query statement below
```

MS SQL Server:

```
/* Write your T-SQL query statement below */
```

PostgreSQL:

```
-- Write your PostgreSQL query statement below
```