

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
```