Problem 1412: Find the Quiet Students in All Exams

Problem Information

Difficulty: Hard
Acceptance Rate: 58.16%
Paid Only: Yes
Tags: Database

Problem Description

Table: `Student`

+--------------------+---------+ | Column Name | Type | +--------------------+---------+ | student_id | int | | student_name | varchar | +--------------------+---------+ student_id is the primary key (column with unique values) for this table. student_name is the name of the student.

Table: `Exam`

+---------------+---------+ | Column Name | Type | +---------------+---------+ | exam_id | int | | student_id | int | | score | int | +---------------+---------+ (exam_id, student_id) is the primary key (combination of columns with unique values) for this table. Each row of this table indicates that the student with student_id had a score points in the exam with id exam_id.

A **quiet student** is the one who took at least one exam and did not score the highest or the lowest score.

Write a solution to report the students `(student_id, student_name)` being quiet in all exams. Do not return the student who has never taken any exam.

Return the result table **ordered** by `student_id`.

The result format is in the following example.

Example 1:

Input: Student table: +------------+--------------+ | student_id | student_name | +------------+--------------+ | 1 | Daniel | | 2 | Jade | | 3 | Stella | | 4 | Jonathan | | 5 | Will | +------------+--------------+ Exam table: +-----------+------------+----------+ | exam_id | student_id | score | +-----------+------------+----------+ | 10 | 1 | 70 | | 10 | 2 | 80 | | 10 | 3 | 90 | | 20 | 1 | 80 | | 30 | 1 | 70 | | 30 | 3 | 80 | | 30 | 4 | 90 | | 40 | 1 | 60 | | 40 | 2 | 70 | | 40 | 4 | 80 | +-----------+------------+----------+ **Output:** +------------+--------------+ | student_id | student_name | +------------+--------------+ | 2 | Jade | +------------+--------------+

Explanation: For exam 1: Student 1 and 3 hold the lowest and high scores respectively. For exam 2: Student 1 hold both highest and lowest score. For exam 3 and 4: Student 1 and 4 hold the lowest and high scores respectively. Student 2 and 5 have never got the highest or lowest in any of the exams. Since student 5 is not taking any exam, he is excluded from the result. So, we only return the information of Student 2.

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
```