Problem 2978: Symmetric Coordinates

Problem Information

Difficulty: Medium
Acceptance Rate: 40.35%
Paid Only: Yes
Tags: Database

Problem Description

Table: `Coordinates`

+-------------+------+ | Column Name | Type | +-------------+------+ | X | int | | Y | int | +-------------+------+ Each row includes X and Y, where both are integers. Table may contain duplicate values.

Two coordindates `(X1, Y1)` and `(X2, Y2)` are said to be **symmetric** coordintes if `X1 == Y2` and `X2 == Y1`.

Write a solution that outputs, among all these **symmetric** **coordintes** , only those **unique** coordinates that satisfy the condition `X1 <= Y1`.

Return _the result table ordered by_ `X` _and_ `Y` _(respectively)_ _in **ascending order**_.

The result format is in the following example.

Example 1:

Input: Coordinates table: +----+----+ | X | Y | +----+----+ | 20 | 20 | | 20 | 20 | | 20 | 21 | | 23 | 22 | | 22 | 23 | | 21 | 20 | +----+----+ **Output:** +----+----+ | x | y | +----+----+ | 20 | 20 | | 20 | 21 | | 22 | 23 | +----+----+ **Explanation:** - (20, 20) and (20, 20) are symmetric coordinates because, X1 == Y2 and X2 == Y1. This results in displaying (20, 20) as a distinctive coordinates. - (20, 21) and (21, 20) are symmetric coordinates because, X1 == Y2 and X2 == Y1. However, only (20, 21) will be displayed because X1 <= Y1. - (23, 22) and (22, 23) are symmetric coordinates because, X1 == Y2 and X2 == Y1. However, only (22, 23) will be displayed because X1 <= Y1. The output table is sorted by X and Y in ascending order.

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
```