

Problem 2314: The First Day of the Maximum Recorded Degree in Each City

Problem Information

Difficulty: Medium

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Table:

Weather

+-----+-----+ | Column Name | Type | +-----+-----+ | city_id | int | | day | date | |
degree | int | +-----+-----+ (city_id, day) is the primary key (combination of columns with unique values) for this table. Each row in this table contains the degree of the weather of a city on a certain day. All the degrees are recorded in the year 2022.

Write a solution to report the day that has the maximum recorded degree in each city. If the maximum degree was recorded for the same city multiple times, return the earliest day among them.

Return the result table ordered by

city_id

in

ascending order

The result format is shown in the following example.

Example 1:

Input:

Weather table: +-----+-----+-----+ | city_id | day | degree | +-----+-----+-----+
| 1 | 2022-01-07 | -12 | | 1 | 2022-03-07 | 5 | | 1 | 2022-07-07 | 24 | | 2 | 2022-08-07 | 37 | | 2 |
2022-08-17 | 37 | | 3 | 2022-02-07 | -7 | | 3 | 2022-12-07 | -6 | +-----+-----+-----+

Output:

+-----+-----+-----+ | city_id | day | degree | +-----+-----+-----+ | 1 |
2022-07-07 | 24 | | 2 | 2022-08-07 | 37 | | 3 | 2022-12-07 | -6 | +-----+-----+-----+

Explanation:

For city 1, the maximum degree was recorded on 2022-07-07 with 24 degrees. For city 2, the maximum degree was recorded on 2022-08-07 and 2022-08-17 with 37 degrees. We choose the earlier date (2022-08-07). For city 3, the maximum degree was recorded on 2022-12-07 with -6 degrees.

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
```

Oracle:

```
/* Write your PL/SQL query statement below */
```

Pandas:

```
import pandas as pd

def find_the_first_day(weather: pd.DataFrame) -> pd.DataFrame:
```

Solutions

MySQL Solution:

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