Problem 1369: Get the Second Most Recent Activity

Problem Information

Difficulty: Hard
Acceptance Rate: 0.00%
Paid Only: No

Problem Description

Table:

UserActivity

+---------------+---------+ | Column Name | Type | +---------------+---------+ | username | varchar | | activity | varchar | | startDate | Date | | endDate | Date | +---------------+---------+ This table may contain duplicates rows. This table contains information about the activity performed by each user in a period of time. A person with username performed an activity from startDate to endDate.

Write a solution to show the

second most recent activity

of each user.

If the user only has one activity, return that one. A user cannot perform more than one activity at the same time.

Return the result table in

any

order.

The result format is in the following example.

Example 1:

Input:

UserActivity table: +------------+-------------+------------+-------------+ | username | activity | startDate | endDate | +------------+-------------+------------+-------------+ | Alice | Travel | 2020-02-12 | 2020-02-20 | | Alice | Dancing | 2020-02-21 | 2020-02-23 | | Alice | Travel | 2020-02-24 | 2020-02-28 | | Bob | Travel | 2020-02-11 | 2020-02-18 | +------------+-------------+------------+-------------+

Output:

+------------+-------------+------------+-------------+ | username | activity | startDate | endDate | +------------+-------------+------------+-------------+ | Alice | Dancing | 2020-02-21 | 2020-02-23 | | Bob | Travel | 2020-02-11 | 2020-02-18 | +------------+-------------+------------+-------------+

Explanation:

The most recent activity of Alice is Travel from 2020-02-24 to 2020-02-28, before that she was dancing from 2020-02-21 to 2020-02-23. Bob only has one record, we just take that one.

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 second_most_recent(user_activity: pd.DataFrame) -> pd.DataFrame:
```

Solutions

MySQL Solution:

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