Problem 1831: Maximum Transaction Each Day

Problem Information

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

Problem Description

Table:

Transactions

+----------------+----------+ | Column Name | Type | +----------------+----------+ | transaction_id | int | | day | datetime | | amount | int | +----------------+----------+ transaction_id is the column with unique values for this table. Each row contains information about one transaction.

Write a solution to report the IDs of the transactions with the

maximum

amount

on their respective day. If in one day there are multiple such transactions, return all of them.

Return the result table

ordered by

transaction_id

in ascending order

.

The result format is in the following example.

Example 1:

Input:

Transactions table: +----------------+--------------------+--------+ | transaction_id | day | amount | +----------------+--------------------+--------+ | 8 | 2021-4-3 15:57:28 | 57 | | 9 | 2021-4-28 08:47:25 | 21 | | 1 | 2021-4-29 13:28:30 | 58 | | 5 | 2021-4-28 16:39:59 | 40 | | 6 | 2021-4-29 23:39:28 | 58 | +----------------+--------------------+--------+

Output:

+----------------+ | transaction_id | +----------------+ | 1 | | 5 | | 6 | | 8 | +----------------+

Explanation:

"2021-4-3" --> We have one transaction with ID 8, so we add 8 to the result table. "2021-4-28" --> We have two transactions with IDs 5 and 9. The transaction with ID 5 has an amount of 40, while the transaction with ID 9 has an amount of 21. We only include the transaction with ID 5 as it has the maximum amount this day. "2021-4-29" --> We have two transactions with IDs 1 and 6. Both transactions have the same amount of 58, so we include both in the result table. We order the result table by transaction_id after collecting these IDs.

Follow up:

Could you solve it without using the

MAX()

function?

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_maximum_transaction(transactions: pd.DataFrame) -> pd.DataFrame:
```

Solutions

MySQL Solution:

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