Problem 2228: Users With Two Purchases Within Seven Days

Problem Information

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

Problem Description

Table:

Purchases

+---------------+------+ | Column Name | Type | +---------------+------+ | purchase_id | int | | user_id | int | | purchase_date | date | +---------------+------+ purchase_id contains unique values. This table contains logs of the dates that users purchased from a certain retailer.

Write a solution to report the IDs of the users that made any two purchases

at most

7

days apart.

Return the result table ordered by

user_id

.

The result format is in the following example.

Example 1:

Input:

Purchases table: +-------------+---------+---------------+ | purchase_id | user_id | purchase_date | +-------------+---------+---------------+ | 4 | 2 | 2022-03-13 | | 1 | 5 | 2022-02-11 | | 3 | 7 | 2022-06-19 | | 6 | 2 | 2022-03-20 | | 5 | 7 | 2022-06-19 | | 2 | 2 | 2022-06-08 | +-------------+---------+---------------+

Output:

+---------+ | user_id | +---------+ | 2 | | 7 | +---------+

Explanation:

User 2 had two purchases on 2022-03-13 and 2022-03-20. Since the second purchase is within 7 days of the first purchase, we add their ID. User 5 had only 1 purchase. User 7 had two purchases on the same day so we add their ID.

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_valid_users(purchases: pd.DataFrame) -> pd.DataFrame:
```

Solutions

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