Problem 1127: User Purchase Platform

Problem Information

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

Problem Description

Table:

Spending

+-------------+---------+ | Column Name | Type | +-------------+---------+ | user_id | int | | spend_date | date | | platform | enum | | amount | int | +-------------+---------+ The table logs the history of the spending of users that make purchases from an online shopping website that has a desktop and a mobile application. (user_id, spend_date, platform) is the primary key (combination of columns with unique values) of this table. The platform column is an ENUM (category) type of ('desktop', 'mobile').

Write a solution to find the total number of users and the total amount spent using the mobile only, the desktop only, and both mobile and desktop together for each date.

Return the result table in

any order

.

The result format is in the following example.

Example 1:

Input:

Spending table: +---------+------------+----------+--------+ | user_id | spend_date | platform | amount | +---------+------------+----------+--------+ | 1 | 2019-07-01 | mobile | 100 | | 1 | 2019-07-01 | desktop | 100 | | 2 | 2019-07-01 | mobile | 100 | | 2 | 2019-07-02 | mobile | 100 | | 3 | 2019-07-01 | desktop | 100 | | 3 | 2019-07-02 | desktop | 100 | +---------+------------+----------+--------+

Output:

+------------+----------+--------------+-------------+ | spend_date | platform | total_amount | total_users | +------------+----------+--------------+-------------+ | 2019-07-01 | desktop | 100 | 1 | | 2019-07-01 | mobile | 100 | 1 | | 2019-07-01 | both | 200 | 1 | | 2019-07-02 | desktop | 100 | 1 | | 2019-07-02 | mobile | 100 | 1 | | 2019-07-02 | both | 0 | 0 | +------------+----------+--------------+-------------+

Explanation:

On 2019-07-01, user 1 purchased using

both

desktop and mobile, user 2 purchased using mobile

only

and user 3 purchased using desktop

only

. On 2019-07-02, user 2 purchased using mobile

only

, user 3 purchased using desktop

only

and no one purchased using

both

platforms.

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 user_purchase(spending: pd.DataFrame) -> pd.DataFrame:
```

Solutions

MySQL Solution:

```
# Write your MySQL query statement below
```

MS SQL Server Solution:

```
/* Write your T-SQL query statement below */
```

PostgreSQL Solution:

```
-- Write your PostgreSQL query statement below
```

Oracle Solution:

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

Pandas Solution:

```
import pandas as pd

def user_purchase(spending: pd.DataFrame) -> pd.DataFrame:
```