

Problem 2329: Product Sales Analysis V

Problem Information

Difficulty: Easy

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Table:

Sales

+-----+-----+ | Column Name | Type | +-----+-----+ | sale_id | int | | product_id | int
| | user_id | int | | quantity | int | +-----+-----+ sale_id contains unique values. product_id
is a foreign key (column with unique values) to

Product

table. Each row of this table shows the ID of the product and the quantity purchased by a user.

Table:

Product

+-----+-----+ | Column Name | Type | +-----+-----+ | product_id | int | | price | int |
+-----+-----+ product_id contains unique values. Each row of this table indicates the
price of each product.

Write a solution to report the spending of each user.

Return the resulting table ordered by

spending

in

descending order

. In case of a tie, order them by

user_id

in ascending order.

The result format is in the following example.

Example 1:

Input:

```
Sales table: +-----+-----+-----+-----+ | sale_id | product_id | user_id | quantity |
+-----+-----+-----+-----+ | 1 | 1 | 101 | 10 | | 2 | 2 | 101 | 1 | | 3 | 3 | 102 | 3 | | 4 | 3 |
102 | 2 | | 5 | 2 | 103 | 3 | +-----+-----+-----+-----+ Product table:
+-----+-----+ | product_id | price | +-----+-----+ | 1 | 10 | | 2 | 25 | | 3 | 15 |
+-----+-----+
```

Output:

```
+-----+-----+ | user_id | spending | +-----+-----+ | 101 | 125 | | 102 | 75 | | 103 | 75 |
+-----+-----+
```

Explanation:

User 101 spent $10 * 10 + 1 * 25 = 125$. User 102 spent $3 * 15 + 2 * 15 = 75$. User 103 spent $3 * 25 = 75$. Users 102 and 103 spent the same amount and we break the tie by their ID while user 101 is on the top.

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 product_sales_analysis(sales: pd.DataFrame, product: pd.DataFrame) ->
pd.DataFrame:
```

Solutions

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