

Problem 2372: Calculate the Influence of Each Salesperson

Problem Information

Difficulty: **Medium**

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Table:

Salesperson

+-----+-----+ | Column Name | Type | +-----+-----+ | salesperson_id | int |
| name | varchar | +-----+-----+ salesperson_id contains unique values. Each row in
this table shows the ID of a salesperson.

Table:

Customer

+-----+-----+ | Column Name | Type | +-----+-----+ | customer_id | int | |
salesperson_id | int | +-----+-----+ customer_id contains unique values.
salesperson_id is a foreign key (reference column) from the Salesperson table. Each row in
this table shows the ID of a customer and the ID of the salesperson.

Table:

Sales

+-----+-----+ | Column Name | Type | +-----+-----+ | sale_id | int | | customer_id |
int | | price | int | +-----+-----+ sale_id contains unique values. customer_id is a foreign
key (reference column) from the Customer table. Each row in this table shows ID of a
customer and the price they paid for the sale with sale_id.

Write a solution to report the sum of prices paid by the customers of each salesperson. If a salesperson does not have any customers, the total value should be

0

.

Return the result table in

any order

.

The result format is shown in the following example.

Example 1:

Input:

```
Salesperson table: +-----+-----+ | salesperson_id | name | +-----+-----+ | 1 |
Alice | | 2 | Bob | | 3 | Jerry | +-----+-----+ Customer table: +-----+-----+ |
customer_id | salesperson_id | +-----+-----+ | 1 | 1 | | 2 | 1 | | 3 | 2 |
+-----+-----+ Sales table: +-----+-----+ | sale_id | customer_id |
price | +-----+-----+ | 1 | 2 | 892 | | 2 | 1 | 354 | | 3 | 3 | 988 | | 4 | 3 | 856 |
+-----+-----+-----+
```

Output:

```
+-----+-----+-----+ | salesperson_id | name | total | +-----+-----+-----+ | 1 |
Alice | 1246 | | 2 | Bob | 1844 | | 3 | Jerry | 0 | +-----+-----+-----+
```

Explanation:

Alice is the salesperson for customers 1 and 2. - Customer 1 made one purchase with 354. - Customer 2 made one purchase with 892. The total for Alice is $354 + 892 = 1246$.

Bob is the salesperson for customers 3. - Customer 1 made one purchase with 988 and 856. The total for Bob is $988 + 856 = 1844$.

Jerry is not the salesperson of any customer. The total for Jerry is 0.

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 calculate_influence(salesperson: pd.DataFrame, customer: pd.DataFrame,
sales: pd.DataFrame) -> pd.DataFrame:
```

Solutions

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