

Problem 1364: Number of Trusted Contacts of a Customer

Problem Information

Difficulty: Medium

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Table:

Customers

+-----+-----+ | Column Name | Type | +-----+-----+ | customer_id | int ||
customer_name | varchar | | email | varchar | +-----+-----+ customer_id is the
column of unique values for this table. Each row of this table contains the name and the email
of a customer of an online shop.

Table:

Contacts

+-----+-----+ | Column Name | Type | +-----+-----+ | user_id | id ||
contact_name | varchar | | contact_email | varchar | +-----+-----+ (user_id,
contact_email) is the primary key (combination of columns with unique values) for this table.
Each row of this table contains the name and email of one contact of customer with user_id.
This table contains information about people each customer trust. The contact may or may not
exist in the Customers table.

Table:

Invoices

+-----+-----+ | Column Name | Type | +-----+-----+ | invoice_id | int || price |
int | | user_id | int | +-----+-----+ invoice_id is the column of unique values for this

table. Each row of this table indicates that user_id has an invoice with invoice_id and a price.

Write a solution to find the following for each

invoice_id

:

customer_name

: The name of the customer the invoice is related to.

price

: The price of the invoice.

contacts_cnt

: The number of contacts related to the customer.

trusted_contacts_cnt

: The number of contacts related to the customer and at the same time they are customers to the shop. (i.e their email exists in the

Customers

table.)

Return the result table

ordered

by

invoice_id

:

The result format is in the following example.

Example 1:

Input:

Customers table: +-----+-----+-----+ | customer_id | customer_name |
email | +-----+-----+-----+ | 1 | Alice | alice@leetcode.com | | 2 | Bob |
bob@leetcode.com | | 13 | John | john@leetcode.com | | 6 | Alex | alex@leetcode.com |
+-----+-----+-----+ Contacts table:
+-----+-----+-----+ | user_id | contact_name | contact_email |
+-----+-----+-----+ | 1 | Bob | bob@leetcode.com | | 1 | John |
john@leetcode.com | | 1 | Jal | jal@leetcode.com | | 2 | Omar | omar@leetcode.com | | 2 | Meir |
meir@leetcode.com | | 6 | Alice | alice@leetcode.com |
+-----+-----+-----+ Invoices table: +-----+-----+-----+ |
invoice_id | price | user_id | +-----+-----+-----+ | 77 | 100 | 1 | | 88 | 200 | 1 | | 99 | 300 |
2 | | 66 | 400 | 2 | | 55 | 500 | 13 | | 44 | 60 | 6 | +-----+-----+-----+

Output:

+-----+-----+-----+-----+-----+ | invoice_id | customer_name |
price | contacts_cnt | trusted_contacts_cnt |
+-----+-----+-----+-----+-----+ | 44 | Alex | 60 | 1 | 1 | | 55 | John |
| 500 | 0 | 0 | | 66 | Bob | 400 | 2 | 0 | | 77 | Alice | 100 | 3 | 2 | | 88 | Alice | 200 | 3 | 2 | | 99 | Bob |
| 300 | 2 | 0 | +-----+-----+-----+-----+-----+

Explanation:

Alice has three contacts, two of them are trusted contacts (Bob and John). Bob has two contacts, none of them is a trusted contact. Alex has one contact and it is a trusted contact (Alice). John doesn't have any contacts.

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 count_trusted_contacts(customers: pd.DataFrame, contacts: pd.DataFrame,
                           invoices: pd.DataFrame) -> pd.DataFrame:
```

Solutions

MySQL Solution:

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