

Problem 2922: Market Analysis III

Problem Information

Difficulty: Medium

Acceptance Rate: 41.59%

Paid Only: Yes

Tags: Database

Problem Description

Table: `Users`

+-----+-----+ | Column Name | Type | +-----+-----+ | seller_id | int || join_date | date | | favorite_brand | varchar | +-----+-----+ seller_id is column of unique values for this table. This table contains seller id, join date, and favorite brand of sellers.

Table: `Items`

+-----+-----+ | Column Name | Type | +-----+-----+ | item_id | int || item_brand | varchar | +-----+-----+ item_id is the column of unique values for this table. This table contains item id and item brand.

Table: `Orders`

+-----+-----+ | Column Name | Type | +-----+-----+ | order_id | int || order_date | date | | item_id | int | | seller_id | int | +-----+-----+ order_id is the column of unique values for this table. item_id is a foreign key to the Items table. seller_id is a foreign key to the Users table. This table contains order id, order date, item id and seller id.

Write a solution to find the **top seller** who has sold the highest number of**unique** items with a **different** brand than their favorite brand. If there are multiple sellers with the same highest count, return all of them.

Return _the result table ordered by_ `seller_id` _in**ascending** order._

The result format is in the following example.

****Example 1:****

****Input:**** Users table: +-----+-----+-----+ | seller_id | join_date | favorite_brand | +-----+-----+-----+ | 1 | 2019-01-01 | Lenovo || 2 | 2019-02-09 | Samsung || 3 | 2019-01-19 | LG | +-----+-----+-----+ Orders table: +-----+-----+-----+ | order_id | order_date | item_id | seller_id | +-----+-----+-----+ | 1 | 2019-08-01 | 4 | 2 || 2 | 2019-08-02 | 2 | 3 || 3 | 2019-08-03 | 3 | 3 || 4 | 2019-08-04 | 1 | 2 || 5 | 2019-08-04 | 4 | 2 | +-----+-----+-----+ Items table: +-----+-----+ | item_id | item_brand | +-----+-----+ | 1 | Samsung || 2 | Lenovo || 3 | LG || 4 | HP | +-----+-----+
****Output:**** +-----+-----+ | seller_id | num_items | +-----+-----+ | 2 | 1 || 3 | 1 | +-----+-----+
****Explanation:**** - The user with seller_id 2 has sold three items, but only two of them are not marked as a favorite. We will include a unique count of 1 because both of these items are identical. - The user with seller_id 3 has sold two items, but only one of them is not marked as a favorite. We will include just that non-favorite item in our count. Since seller_ids 2 and 3 have the same count of one item each, they both will be displayed in the output.

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
```