

Problem 1479: Sales by Day of the Week

Problem Information

Difficulty: Hard

Acceptance Rate: 76.72%

Paid Only: Yes

Tags: Database

Problem Description

Table: `Orders`

+-----+-----+ | Column Name | Type | +-----+-----+ | order_id | int ||
customer_id | int | | order_date | date | | item_id | varchar | | quantity | int |
+-----+-----+ (ordered_id, item_id) is the primary key (combination of columns with
unique values) for this table. This table contains information on the orders placed. order_date
is the date item_id was ordered by the customer with id customer_id.

Table: `Items`

+-----+-----+ | Column Name | Type | +-----+-----+ | item_id |
varchar | | item_name | varchar | | item_category | varchar | +-----+-----+ item_id
is the primary key (column with unique values) for this table. item_name is the name of the
item. item_category is the category of the item.

You are the business owner and would like to obtain a sales report for category items and the day of the week.

Write a solution to report how many units in each category have been ordered on each **day of the week**.

Return the result table **ordered** by `category` .

The result format is in the following example.

Example 1:

Input: Orders table:

customer_id	order_date	item_id	quantity	order_id
				+-----+ 1 1 2020-06-01 1 10 2 1
2020-06-08	2 10 3 2 2020-06-02 1 5 4 3 2020-06-03 3 5 5 4 2020-06-04			
4 1 6 4 2020-06-05 5 5 7 5 2020-06-05 1 10 8 5 2020-06-14 4 5 9				
5 2020-06-21 3 5 +-----+ +-----+ +-----+ +-----+ Items table:				
		item_id	item_name	item_category
		+-----+ 1 LC Alg. Book Book 2 LC DB. Book Book 3		
		LC SmarthPhone Phone 4 LC Phone 2020 Phone 5 LC SmartGlass Glasses 6		
		LC T-Shirt XL T-Shirt +-----+ +-----+ +-----+ **Output:**		
				Category
				Monday Tuesday Wednesday Thursday Friday Saturday Sunday
				+-----+ +-----+ +-----+ +-----+ +-----+ +-----+ +-----+ Book 20 5
				0 0 10 0 0 Glasses 0 0 0 0 5 0 0 Phone 0 0 5 1 0 0 10 T-Shirt 0
				0 0 0 0 0 0
				+-----+

Explanation: On Monday (2020-06-01, 2020-06-08) were sold a total of 20 units (10 + 10) in the category Book (ids: 1, 2). On Tuesday (2020-06-02) were sold a total of 5 units in the category Book (ids: 1, 2). On Wednesday (2020-06-03) were sold a total of 5 units in the category Phone (ids: 3, 4). On Thursday (2020-06-04) were sold a total of 1 unit in the category Phone (ids: 3, 4). On Friday (2020-06-05) were sold 10 units in the category Book (ids: 1, 2) and 5 units in Glasses (ids: 5). On Saturday there are no items sold. On Sunday (2020-06-14, 2020-06-21) were sold a total of 10 units (5 +5) in the category Phone (ids: 3, 4). There are no sales of T-shirts.

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
```