

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 |
+-----+-----+ (order_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: +-----+-----+-----+-----+-----+ | order_id |
customer_id | order_date | item_id | quantity |
+-----+-----+-----+-----+-----+ | 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
```