Problem 1571: Warehouse Manager

Problem Information

Difficulty: Easy
Acceptance Rate: 0.00%
Paid Only: No

Problem Description

Table:

Warehouse

+--------------+---------+ | Column Name | Type | +--------------+---------+ | name | varchar | | product_id | int | | units | int | +--------------+---------+ (name, product_id) is the primary key (combination of columns with unique values) for this table. Each row of this table contains the information of the products in each warehouse.

Table:

Products

+---------------+---------+ | Column Name | Type | +---------------+---------+ | product_id | int | | product_name | varchar | | Width | int | | Length | int | | Height | int | +---------------+---------+ product_id is the primary key (column with unique values) for this table. Each row of this table contains information about the product dimensions (Width, Lenght, and Height) in feets of each product.

Write a solution to report the number of cubic feet of

volume

the inventory occupies in each warehouse.

Return the result table in

any order

.

The query result format is in the following example.

Example 1:

Input:

Warehouse table: +------------+--------------+-------------+ | name | product_id | units | +------------+--------------+-------------+ | LCHouse1 | 1 | 1 | | LCHouse1 | 2 | 10 | | LCHouse1 | 3 | 5 | | LCHouse2 | 1 | 2 | | LCHouse2 | 2 | 2 | | LCHouse3 | 4 | 1 | +------------+--------------+-------------+ Products table: +------------+--------------+------------+----------+-----------+ | product_id | product_name | Width | Length | Height | +------------+--------------+------------+----------+-----------+ | 1 | LC-TV | 5 | 50 | 40 | | 2 | LC-KeyChain | 5 | 5 | 5 | | 3 | LC-Phone | 2 | 10 | 10 | | 4 | LC-T-Shirt | 4 | 10 | 20 | +------------+--------------+------------+----------+-----------+

Output:

+----------------+------------+ | warehouse_name | volume | +----------------+------------+ | LCHouse1 | 12250 | | LCHouse2 | 20250 | | LCHouse3 | 800 | +----------------+------------+

Explanation:

Volume of product_id = 1 (LC-TV), 5x50x40 = 10000 Volume of product_id = 2 (LC-KeyChain), 5x5x5 = 125 Volume of product_id = 3 (LC-Phone), 2x10x10 = 200 Volume of product_id = 4 (LC-T-Shirt), 4x10x20 = 800 LCHouse1: 1 unit of LC-TV + 10 units of LC-KeyChain + 5 units of LC-Phone. Total volume: 1*10000 + 10*125 + 5*200 = 12250 cubic feet LCHouse2: 2 units of LC-TV + 2 units of LC-KeyChain. Total volume: 2*10000 + 2*125 = 20250 cubic feet LCHouse3: 1 unit of LC-T-Shirt. Total volume: 1*800 = 800 cubic feet.

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 warehouse_manager(warehouse: pd.DataFrame, products: pd.DataFrame) ->
pd.DataFrame:
```

Solutions

MySQL Solution:

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