Problem 1068: Product Sales Analysis I

Problem Information

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

Problem Description

Table:

Sales

+-------------+-------+ | Column Name | Type | +-------------+-------+ | sale_id | int | | product_id | int | | year | int | | quantity | int | | price | int | +-------------+-------+ (sale_id, year) is the primary key (combination of columns with unique values) of this table. product_id is a foreign key (reference column) to

Product

table. Each row of this table shows a sale on the product product_id in a certain year. Note that the price is per unit.

Table:

Product

+--------------+---------+ | Column Name | Type | +--------------+---------+ | product_id | int | | product_name | varchar | +--------------+---------+ product_id is the primary key (column with unique values) of this table. Each row of this table indicates the product name of each product.

Write a solution to report the

product_name

,

year

, and

price

for each

sale_id

in the

Sales

table.

Return the resulting table in

any order

.

The result format is in the following example.

Example 1:

Input:

Sales table: +---------+------------+------+----------+-------+ | sale_id | product_id | year | quantity | price | +---------+------------+------+----------+-------+ | 1 | 100 | 2008 | 10 | 5000 | | 2 | 100 | 2009 | 12 | 5000 | | 7 | 200 | 2011 | 15 | 9000 | +---------+------------+------+----------+-------+ Product table: +------------+--------------+ | product_id | product_name | +------------+--------------+ | 100 | Nokia | | 200 | Apple | | 300 | Samsung | +------------+--------------+

Output:

+--------------+-------+-------+ | product_name | year | price | +--------------+-------+-------+ | Nokia | 2008 | 5000 | | Nokia | 2009 | 5000 | | Apple | 2011 | 9000 | +--------------+-------+-------+

Explanation:

From sale_id = 1, we can conclude that Nokia was sold for 5000 in the year 2008. From sale_id = 2, we can conclude that Nokia was sold for 5000 in the year 2009. From sale_id = 7, we can conclude that Apple was sold for 9000 in the year 2011.

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 sales_analysis(sales: pd.DataFrame, product: pd.DataFrame) ->
pd.DataFrame:
```

Solutions

MySQL Solution:

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