Problem 2362: Generate the Invoice

Problem Information

Difficulty: Hard
Acceptance Rate: 75.26%
Paid Only: Yes
Tags: Database

Problem Description

Table: `Products`

+-------------+------+ | Column Name | Type | +-------------+------+ | product_id | int | | price | int | +-------------+------+ product_id contains unique values. Each row in this table shows the ID of a product and the price of one unit.

Table: `Purchases`

+-------------+------+ | Column Name | Type | +-------------+------+ | invoice_id | int | | product_id | int | | quantity | int | +-------------+------+ (invoice_id, product_id) is the primary key (combination of columns with unique values) for this table. Each row in this table shows the quantity ordered from one product in an invoice.

Write a solution to show the details of the invoice with the highest price. If two or more invoices have the same price, return the details of the one with the smallest `invoice_id`.

Return the result table in **any order**.

The result format is shown in the following example.

Example 1:

Input: Products table: +------------+-------+ | product_id | price | +------------+-------+ | 1 | 100 | | 2 | 200 | +------------+-------+ Purchases table: +------------+------------+----------+ | invoice_id | product_id | quantity | +------------+------------+----------+ | 1 | 1 | 2 | | 3 | 2 | 1 | | 2 | 2 | 3 | | 2 | 1 | 4 | | 4 | 1 | 10 | +------------+------------+----------+ **Output:** +------------+----------+-------+ |

product_id | quantity | price | +------------+----------+-------+ | 2 | 3 | 600 | | 1 | 4 | 400 | +------------+----------+-------+ **Explanation:** Invoice 1: price = (2 * 100) = $200 Invoice 2: price = (4 * 100) + (3 * 200) = $1000 Invoice 3: price = (1 * 200) = $200 Invoice 4: price = (10 * 100) = $1000 The highest price is $1000, and the invoices with the highest prices are 2 and 4. We return the details of the one with the smallest ID, which is invoice 2.

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
```