

# Problem 1083: Sales Analysis II

## Problem Information

**Difficulty:** Easy

**Acceptance Rate:** 0.00%

**Paid Only:** No

## Problem Description

Table:

Product

+-----+-----+ | Column Name | Type | +-----+-----+ | product\_id | int | |  
product\_name | varchar | | unit\_price | int | +-----+-----+ product\_id is the primary key  
(column with unique values) of this table. Each row of this table indicates the name and the  
price of each product.

Table:

Sales

+-----+-----+ | Column Name | Type | +-----+-----+ | seller\_id | int | |  
product\_id | int | | buyer\_id | int | | sale\_date | date | | quantity | int | | price | int |  
+-----+-----+ This table might have repeated rows. product\_id is a foreign key  
(reference column) to the Product table. buyer\_id is never NULL. sale\_date is never NULL.  
Each row of this table contains some information about one sale.

Write a solution to report the

buyers

who have bought

but not

iPhone

. Note that

S8

and

iPhone

are products presented in the

Product

table.

Return the result table in

any order

.

The result format is in the following example.

Example 1:

Input:

```
Product table: +-----+-----+-----+ | product_id | product_name | unit_price |
+-----+-----+-----+ | 1 | S8 | 1000 | | 2 | G4 | 800 | | 3 | iPhone | 1400 |
+-----+-----+-----+ Sales table:
+-----+-----+-----+ | seller_id | product_id | buyer_id |
sale_date | quantity | price | +-----+-----+-----+ | 1 | 1 | 1
| 2019-01-21 | 2 | 2000 | | 1 | 2 | 2 | 2019-02-17 | 1 | 800 | | 2 | 1 | 3 | 2019-06-02 | 1 | 800 | | 3 |
3 | 3 | 2019-05-13 | 2 | 2800 | +-----+-----+-----+
```

Output:

```
+-----+ | buyer_id | +-----+ | 1 | +-----+
```

Explanation:

The buyer with id 1 bought an S8 but did not buy an iPhone. The buyer with id 3 bought both.

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

## Solutions

### MySQL Solution:

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