

Problem 1715: Count Apples and Oranges

Problem Information

Difficulty: **Medium**

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Table:

Boxes

+-----+-----+ | Column Name | Type | +-----+-----+ | box_id | int | | chest_id | int | | apple_count | int | | orange_count | int | +-----+-----+ box_id is the column with unique values for this table. chest_id is a foreign key (reference column) of the chests table. This table contains information about the boxes and the number of oranges and apples they have. Each box may include a chest, which also can contain oranges and apples.

Table:

Chests

+-----+-----+ | Column Name | Type | +-----+-----+ | chest_id | int | | apple_count | int | | orange_count | int | +-----+-----+ chest_id is the column with unique values for this table. This table contains information about the chests and the corresponding number of oranges and apples they have.

Write a solution to count the number of apples and oranges in all the boxes. If a box contains a chest, you should also include the number of apples and oranges it has.

The result format is in the following example.

Example 1:

Input:

Boxes table: +-----+-----+-----+-----+ | box_id | chest_id | apple_count |
orange_count | +-----+-----+-----+-----+ | 2 | null | 6 | 15 | | 18 | 14 | 4 | 15 | |
19 | 3 | 8 | 4 | | 12 | 2 | 19 | 20 | | 20 | 6 | 12 | 9 | | 8 | 6 | 9 | 9 | | 3 | 14 | 16 | 7 |
+-----+-----+-----+-----+ Chests table: +-----+-----+-----+ |
chest_id | apple_count | orange_count | +-----+-----+-----+ | 6 | 5 | 6 | | 14 | 20 |
10 | | 2 | 8 | 8 | | 3 | 19 | 4 | | 16 | 19 | 19 | +-----+-----+-----+

Output:

+-----+-----+ | apple_count | orange_count | +-----+-----+ | 151 | 123 |
+-----+-----+

Explanation:

box 2 has 6 apples and 15 oranges. box 18 has 4 + 20 (from the chest) = 24 apples and 15 + 10 (from the chest) = 25 oranges. box 19 has 8 + 19 (from the chest) = 27 apples and 4 + 4 (from the chest) = 8 oranges. box 12 has 19 + 8 (from the chest) = 27 apples and 20 + 8 (from the chest) = 28 oranges. box 20 has 12 + 5 (from the chest) = 17 apples and 9 + 6 (from the chest) = 15 oranges. box 8 has 9 + 5 (from the chest) = 14 apples and 9 + 6 (from the chest) = 15 oranges. box 3 has 16 + 20 (from the chest) = 36 apples and 7 + 10 (from the chest) = 17 oranges. Total number of apples = 6 + 24 + 27 + 27 + 17 + 14 + 36 = 151 Total number of oranges = 15 + 25 + 8 + 28 + 15 + 15 + 17 = 123

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 count_apples_and_oranges(boxes: pd.DataFrame, chests: pd.DataFrame) ->
pd.DataFrame:
```

Solutions

MySQL Solution:

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