

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
19	14	4	15	19
3	12	8	4	12
8	2	19	20	20
4	19	20	6	12
12	9	8	6	9
9	9	6	9	9
18	14	3	16	7
14	16	10	19	19
16	17	19	19	19
19	20	10	12	8
10	14	3	19	4
12	16	19	19	19
19	20	10	12	8

Chests table:

chest_id	apple_count	orange_count
6	5	6
14	20	10
10	12	8
8	15	19
3	19	4
19	16	19
19	17	17
17	15	15
15	14	14
14	13	16
13	12	12
12	11	19
11	10	10
10	9	9
9	8	8
8	7	7
7	6	6
6	5	5
5	4	4
4	3	3
3	2	2
2	1	1
1	0	0

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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