Description | Accepted | Editorial | Solutions | Submissions

1715. Count Apples and Oranges

Premium

Solved

Medium | Topics

SQL Schema > Pandas Schema >

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

Seen this question in a real interview before? 1/5

Yes | No

Accepted 18,761/24.8K | Acceptance Rate 75.7%

Topics

Discussion (8)

Submit

Code

Pandas • Auto

```python
import pandas as pd

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

    df = pd.merge(boxes, chests, on='chest_id', how='left')
    df = df.fillna(0)

    apple = 0
    oranges = 0

    for index, row in df.iterrows():
        apple += row['apple_count_x'] + row['apple_count_y']
        oranges += row['orange_count_x'] + row['orange_count_y']

    return pd.DataFrame({
        'apple_count': [apple],
        'orange_count': [oranges]
    })
```

Saved

Ln 6, Col 22

Testcase | Test Result

Accepted Runtime: 315 ms

Case 1

Input

Boxes =

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