Problem 1294: Weather Type in Each Country

Problem Information

Difficulty: Easy
Acceptance Rate: 0.00%
Paid Only: No

Problem Description

Table:

Countries

+---------------+---------+ | Column Name | Type | +---------------+---------+ | country_id | int | | country_name | varchar | +---------------+---------+ country_id is the primary key (column with unique values) for this table. Each row of this table contains the ID and the name of one country.

Table:

Weather

+---------------+------+ | Column Name | Type | +---------------+------+ | country_id | int | | weather_state | int | | day | date | +---------------+------+ (country_id, day) is the primary key (combination of columns with unique values) for this table. Each row of this table indicates the weather state in a country for one day.

Write a solution to find the type of weather in each country for

November 2019

.

The type of weather is:

Cold

if the average

weather_state

is less than or equal

15

,

Hot

if the average

weather_state

is greater than or equal to

25

, and

Warm

otherwise.

Return the result table in

any order

.

The result format is in the following example.

Example 1:

Input:

Countries table: +------------+--------------+ | country_id | country_name | +------------+--------------+ | 2 | USA | | 3 | Australia | | 7 | Peru | | 5 | China | | 8 | Morocco | | 9 | Spain | +------------+--------------+ Weather table: +------------+--------------+------------+ | country_id | weather_state | day | +------------+--------------+------------+ | 2 | 15 | 2019-11-01 | | 2 | 12 | 2019-10-28 | | 2 | 12 | 2019-10-27 | | 3 | -2 | 2019-11-10 | | 3 | 0 | 2019-11-11 | | 3 | 3 | 2019-11-12 | | 5 | 16 | 2019-11-07 | | 5 | 18 | 2019-11-09 | | 5 | 21 | 2019-11-23 | | 7 | 25 | 2019-11-28 | | 7 | 22 | 2019-12-01 | | 7 | 20 | 2019-12-02 | | 8 | 25 | 2019-11-05 | | 8 | 27 | 2019-11-15 | | 8 | 31 | 2019-11-25 | | 9 | 7 | 2019-10-23 | | 9 | 3 | 2019-12-23 | +------------+--------------+------------+

Output:

+--------------+--------------+ | country_name | weather_type | +--------------+--------------+ | USA | Cold | | Australia | Cold | | Peru | Hot | | Morocco | Hot | | China | Warm | +--------------+--------------+

Explanation:

Average weather_state in USA in November is (15) / 1 = 15 so weather type is Cold. Average weather_state in Austraila in November is (-2 + 0 + 3) / 3 = 0.333 so weather type is Cold. Average weather_state in Peru in November is (25) / 1 = 25 so the weather type is Hot. Average weather_state in China in November is (16 + 18 + 21) / 3 = 18.333 so weather type is Warm. Average weather_state in Morocco in November is (25 + 27 + 31) / 3 = 27.667 so weather type is Hot. We know nothing about the average weather_state in Spain in November so we do not include it in the result table.

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 weather_type(countries: pd.DataFrame, weather: pd.DataFrame) ->
pd.DataFrame:
```

Solutions

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