Problem 1783: Grand Slam Titles

Problem Information

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

Problem Description

Table:

Players

+----------------+---------+ | Column Name | Type | +----------------+---------+ | player_id | int | | player_name | varchar | +----------------+---------+ player_id is the primary key (column with unique values) for this table. Each row in this table contains the name and the ID of a tennis player.

Table:

Championships

+---------------+---------+ | Column Name | Type | +---------------+---------+ | year | int | | Wimbledon | int | | Fr_open | int | | US_open | int | | Au_open | int | +---------------+---------+ year is the primary key (column with unique values) for this table. Each row of this table contains the IDs of the players who won one each tennis tournament of the grand slam.

Write a solution to report the number of grand slam tournaments won by each player. Do not include the players who did not win any tournament.

Return the result table in

any order

.

The result format is in the following example.

Example 1:

Input:

Players table: +-----------+-------------+ | player_id | player_name | +-----------+-------------+ | 1 | Nadal | | 2 | Federer | | 3 | Novak | +-----------+-------------+ Championships table: +------+-----------+---------+---------+---------+ | year | Wimbledon | Fr_open | US_open | Au_open | +------+-----------+---------+---------+---------+ | 2018 | 1 | 1 | 1 | 1 | | 2019 | 1 | 1 | 2 | 2 | | 2020 | 2 | 1 | 2 | 2 | +------+-----------+---------+---------+---------+

Output:

+-----------+-------------+-------------------+ | player_id | player_name | grand_slams_count | +-----------+-------------+-------------------+ | 2 | Federer | 5 | | 1 | Nadal | 7 | +-----------+-------------+-------------------+

Explanation:

Player 1 (Nadal) won 7 titles: Wimbledon (2018, 2019), Fr_open (2018, 2019, 2020), US_open (2018), and Au_open (2018). Player 2 (Federer) won 5 titles: Wimbledon (2020), US_open (2019, 2020), and Au_open (2019, 2020). Player 3 (Novak) did not win anything, we did not include them 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 grand_slam_titles(players: pd.DataFrame, championships: pd.DataFrame) ->
pd.DataFrame:
```

Solutions

MySQL Solution:

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