Problem 3246: Premier League Table Ranking

Problem Information

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

Problem Description

Table:

TeamStats

+------------------+---------+ | Column Name | Type | +------------------+---------+ | team_id | int | | team_name | varchar | | matches_played | int | | wins | int | | draws | int | | losses | int | +------------------+---------+ team_id is the unique key for this table. This table contains team id, team name, matches_played, wins, draws, and losses.

Write a solution to calculate the

points

and

rank

for each team in the league. Points are calculated as follows:

3

points for a

win

1

point for a

draw

0

points for a

loss

Note:

Teams with the same points must be assigned the same rank.

Return

the result table ordered by

points

in

descending

,

and then by

team_name

in

ascending

order.

The query result format is in the following example.

Example:

Input:

TeamStats

table:

+---------+-----------------+----------------+------+-------+--------+ | team_id | team_name | matches_played | wins | draws | losses | +---------+-----------------+----------------+------+-------+--------+ | 1 | Manchester City | 10 | 6 | 2 | | 2 | Liverpool | 10 | 6 | 2 | | | 3 | Chelsea | 10 | 5 | 3 | 2 | | 4 | Arsenal | 10 | 4 | 4 | 2 | | 5 | Tottenham | 10 | 3 | 5 | 2 | +---------+-----------------+----------------+------+-------+--------+

Output:

+---------+-----------------+--------+----------+ | team_id | team_name | points | position | +---------+-----------------+--------+----------+ | 2 | Liverpool | 20 | 1 | | 1 | Manchester City | 20 | 1 | | 3 | Chelsea | 18 | 3 | | 4 | Arsenal | 16 | 4 | | 5 | Tottenham | 14 | 5 | +---------+-----------------+--------+----------+

Explanation:

Manchester City and Liverpool both have 20 points (6 wins * 3 points + 2 draws * 1 point), so they share position 1.

Chelsea has 18 points (5 wins * 3 points + 3 draws * 1 point) and is position 3rd.

Arsenal has 16 points (4 wins * 3 points + 4 draws * 1 point) and is position 4th.

Tottenham has 14 points (3 wins * 3 points + 5 draws * 1 point) and is position 5th.

The output table is ordered by points in descending order, then by team_name in ascending order.

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 calculate_team_standings(team_stats: pd.DataFrame) -> pd.DataFrame:
```

Solutions

MySQL Solution:

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