Problem 3322: Premier League Table Ranking III

Problem Information

Difficulty: Medium
Acceptance Rate: 69.84%
Paid Only: Yes
Tags: Database

Problem Description

Table: `SeasonStats`

+------------------+---------+ | Column Name | Type | +------------------+---------+ | season_id | int | | team_id | int | | team_name | varchar | | matches_played | int | | wins | int | | draws | int | | losses | int | | goals_for | int | | goals_against | int | +------------------+---------+ (season_id, team_id) is the unique key for this table. This table contains season id, team id, team name, matches played, wins, draws, losses, goals scored (goals_for), and goals conceded (goals_against) for each team in each season.

Write a solution to calculate the **points** , **goal difference** , and **position **for **each team** in **each season**. The position ranking should be determined as follows:

* Teams are first ranked by their total points (highest to lowest) * If points are tied, teams are then ranked by their goal difference (highest to lowest) * If goal difference is also tied, teams are then ranked alphabetically by team name

Points are calculated as follows:

* `3` points for a **win** * `1` point for a **draw** * `0` points for a **loss**

Goal difference is calculated as: `goals_for - goals_against`

Return _the result table ordered by_ `season_id` _in**ascending** order, then by_ position _in**ascending** order, and finally by_ `team_name` _in**ascending** order._

The query result format is in the following example.

Example:

Input:

`SeasonStats` table:

+------------+---------+------------------+----------------+------+-------+--------+-----------+---------------+ | season_id | team_id | team_name | matches_played | wins | draws | losses | goals_for | goals_against |
+------------+---------+------------------+----------------+------+-------+--------+-----------+---------------+ | 2021 | 1 | Manchester City | 38 | 29 | 6 | 3 | 99 | 26 | | 2021 | 2 | Liverpool | 38 | 28 | 8 | 2 | 94 | 26 | | 2021 | 3 | Chelsea | 38 | 21 | 11 | 6 | 76 | 33 | | 2021 | 4 | Tottenham | 38 | 22 | 5 | 11 | 69 | 40 | | 2021 | 5 | Arsenal | 38 | 22 | 3 | 13 | 61 | 48 | | 2022 | 1 | Manchester City | 38 | 28 | 5 | 5 | 94 | 33 | | 2022 | 2 | Arsenal | 38 | 26 | 6 | 6 | 88 | 43 | | 2022 | 3 | Manchester United | 38 | 23 | 6 | 9 | 58 | 43 | | 2022 | 4 | Newcastle | 38 | 19 | 14 | 5 | 68 | 33 | | 2022 | 5 | Liverpool | 38 | 19 | 10 | 9 | 75 | 47 |
+------------+---------+------------------+----------------+------+-------+--------+-----------+---------------+

Output:

+------------+---------+------------------+--------+-----------------+----------+ | season_id | team_id | team_name | points | goal_difference | position |
+------------+---------+------------------+--------+-----------------+----------+ | 2021 | 1 | Manchester City | 93 | 73 | 1 | | 2021 | 2 | Liverpool | 92 | 68 | 2 | | 2021 | 3 | Chelsea | 74 | 43 | 3 | | 2021 | 4 | Tottenham | 71 | 29 | 4 | | 2021 | 5 | Arsenal | 69 | 13 | 5 | | 2022 | 1 | Manchester City | 89 | 61 | 1 | | 2022 | 2 | Arsenal | 84 | 45 | 2 | | 2022 | 3 | Manchester United | 75 | 15 | 3 | | 2022 | 4 | Newcastle | 71 | 35 | 4 | | 2022 | 5 | Liverpool | 67 | 28 | 5 |
+------------+---------+------------------+--------+-----------------+----------+

Explanation:

* For the 2021 season: * Manchester City has 93 points (29 * 3 + 6 * 1) and a goal difference of 73 (99 - 26). * Liverpool has 92 points (28 * 3 + 8 * 1) and a goal difference of 68 (94 - 26). * Chelsea has 74 points (21 * 3 + 11 * 1) and a goal difference of 43 (76 - 33). * Tottenham has 71 points (22 * 3 + 5 * 1) and a goal difference of 29 (69 - 40). * Arsenal has 69 points (22 * 3 + 3 * 1) and a goal difference of 13 (61 - 48). * For the 2022 season: * Manchester City has 89 points (28 * 3 + 5 * 1) and a goal difference of 61 (94 - 33). * Arsenal has 84 points (26 * 3 + 6 * 1) and a goal difference of 45 (88 - 43). * Manchester United has 75 points (23 * 3 + 6 * 1) and a goal difference of 15 (58 - 43). * Newcastle has 71 points (19 * 3 + 14 * 1) and a goal difference of 35 (68 - 33). * Liverpool has 67 points (19 * 3 + 10 * 1) and a goal difference of 28 (75 - 47). * The teams are ranked first by points, then by goal difference, and finally by

team name. * The output is ordered by season_id ascending, then by rank ascending, and finally by team_name ascending.

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
```