

Problem 3384: Team Dominance by Pass Success

Problem Information

Difficulty: **Hard**

Acceptance Rate: 72.56%

Paid Only: Yes

Tags: Database

Problem Description

Table: `Teams`

+-----+-----+ | Column Name | Type | +-----+-----+ | player_id | int | |
team_name | varchar | +-----+-----+ player_id is the unique key for this table. Each
row contains the unique identifier for player and the name of one of the teams participating in
that match.

Table: `Passes`

+-----+-----+ | Column Name | Type | +-----+-----+ | pass_from | int | |
time_stamp | varchar | | pass_to | int | +-----+-----+ (pass_from, time_stamp) is the
primary key for this table. pass_from is a foreign key to player_id from Teams table. Each row
represents a pass made during a match, time_stamp represents the time in minutes
(00:00-90:00) when the pass was made, pass_to is the player_id of the player receiving the
pass.

Write a solution to calculate the **dominance score** for each team in **both halves** of the
match. The rules are as follows:

* A match is divided into two halves: **first half** (00:00 - 45:00 minutes) and **second
half** (45:01 - 90:00 minutes) * The dominance score is calculated based on successful and
intercepted passes: * When pass_to is a player from the **same team**: +1 point * When
pass_to is a player from the **opposing team** (interception): -1 point * A higher dominance
score indicates better passing performance

Return _the result table ordered_ _by_ `team_name` and `half_number` _in**ascending** order_.

The result format is in the following example.

Example:

Input:

Teams table:

```
+-----+-----+ | player_id | team_name | +-----+-----+ | 1 | Arsenal | | 2 | Arsenal | | 3 | Arsenal | | 4 | Chelsea | | 5 | Chelsea | | 6 | Chelsea | +-----+-----+
```

Passes table:

```
+-----+-----+-----+ | pass_from | time_stamp | pass_to | +-----+-----+ | 1 | 00:15 | 2 | | 2 | 00:45 | 3 | | 3 | 01:15 | 1 | | 4 | 00:30 | 1 | | 2 | 46:00 | 3 | | 3 | 46:15 | 4 | | 1 | 46:45 | 2 | | 5 | 46:30 | 6 | +-----+-----+
```

Output:

```
+-----+-----+-----+ | team_name | half_number | dominance | +-----+-----+ | Arsenal | 1 | 3 | | Arsenal | 2 | 1 | | Chelsea | 1 | -1 | | Chelsea | 2 | 1 | +-----+-----+
```

Explanation:

* **First Half (00:00-45:00):** * Arsenal's passes: * 1 -> 2 (00:15): Successful pass (+1) * 2 -> 3 (00:45): Successful pass (+1) * 3 -> 1 (01:15): Successful pass (+1) * Chelsea's passes: * 4 -> 1 (00:30): Intercepted by Arsenal (-1) * **Second Half (45:01-90:00):** * Arsenal's passes: * 2 -> 3 (46:00): Successful pass (+1) * 3 -> 4 (46:15): Intercepted by Chelsea (-1) * 1 -> 2 (46:45): Successful pass (+1) * Chelsea's passes: * 5 -> 6 (46:30): Successful pass (+1) * The results are ordered by team_name and then half_number

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
```