

# 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	half_number
1	Arsenal	1
2	Arsenal	2
3	Arsenal	3
4	Chelsea	1
5	Chelsea	2
6	Chelsea	3

Passes table:

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

**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
```