

# Problem 1194: Tournament Winners

## Problem Information

Difficulty: **Hard**

Acceptance Rate: 0.00%

Paid Only: No

## Problem Description

Table:

Players

```
+-----+-----+ | Column Name | Type | +-----+-----+ | player_id | int | | group_id |  
int | +-----+-----+ player_id is the primary key (column with unique values) of this table.  
Each row of this table indicates the group of each player.
```

Table:

Matches

```
+-----+-----+ | Column Name | Type | +-----+-----+ | match_id | int | |  
first_player | int | | second_player | int | | first_score | int | | second_score | int |  
+-----+-----+ match_id is the primary key (column with unique values) of this table.  
Each row is a record of a match, first_player and second_player contain the player_id of each  
match. first_score and second_score contain the number of points of the first_player and  
second_player respectively. You may assume that, in each match, players belong to the same  
group.
```

The winner in each group is the player who scored the maximum total points within the group.  
In the case of a tie, the

lowest

player\_id

wins.

Write a solution to find the winner in each group.

Return the result table in

any order

.

The result format is in the following example.

Example 1:

Input:

```
Players table: +-----+-----+ | player_id | group_id | +-----+-----+ | 15 | 1 | | 25 | 1 | | 30 | 1 | | 45 | 1 | | 10 | 2 | | 35 | 2 | | 50 | 2 | | 20 | 3 | | 40 | 3 | +-----+-----+
Matches table: +-----+-----+-----+-----+ | match_id | first_player | second_player | first_score | second_score |
+-----+-----+-----+-----+ | 1 | 15 | 45 | 3 | 0 | | 2 | 30 | 25 | 1 | 2 | | 3 | 30 | 15 | 2 | 0 | | 4 | 40 | 20 | 5 | 2 | | 5 | 35 | 50 | 1 | 1 |
+-----+-----+-----+-----+
```

Output:

```
+-----+-----+ | group_id | player_id | +-----+-----+ | 1 | 15 | | 2 | 35 | | 3 | 40 |
+-----+-----+
```

## 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 tournament_winners(players: pd.DataFrame, matches: pd.DataFrame) ->
pd.DataFrame:
```

## Solutions

### MySQL Solution:

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