

➤ PostgreSQL 9.8

You are given the two tables, players and matches, with the following structure:

```
CREATE TABLE players (  
    player_id integer not null unique,  
    group_id integer not null  
);  
  
CREATE TABLE matches (  
    match_id integer not null unique,  
    first_player integer not null,  
    second_player integer not null,  
    first_score integer not null,  
    second_score integer not null  
)
```

Each record in the table `players` represents a single player in the tournament. The column, `player\_id` contains the ID of each player. The column `group\_id` contains the ID of the group that each player belongs to.

Each record in the table `matches` represents a single match in the group stage. The column `first\_player` ( `second\_player` ) contains the ID of the first player (second player) in each match. The column `first\_score` ( `second\_score` ) contains the number of points scored by the first player ( second player ) in each match. You may assume that, in each match, players belong to the same group.

You would like to compute the winner in each group. The winner in each group is the player who scored the maximum total number of points within the group. If there is more than one such player, the winner is the one with the lowest ID,

Write an SQL query that returns a table containing the winner of each group. Each record should contain the ID of the group and the ID of the winner in this group. Records should be ordered by increasing ID number of the group.

Assumptions:

- Groups are numbered with consecutive integers beginning from 1.
- Every player from table matches occurs in table `players`.
- In each match players belong to the same group.
- Score is a value between 0 and 1000000.
- There is at most 100 players.
- There is at most 100 matches.

Examples:

`players_id`	`group_id`
20	2
30	1
40	3
45	1
50	2
65	1

`match_id`	`first_player`	`second_player`	`first_score`	`second_score`
1	30	45	10	12
2	20	50	5	5
13	65	45	10	10
5	30	65	3	15
42	45	65	8	4

Output:

`group_id`	`winner_id`
1	45
2	20
3	40

In group 1 the winner is player 45 with the total score of 30 points. In group 2 both players scored 5 points, but player 20 has lower ID and is a winner. In group 3 there is only one player, and although she didn't play any matches, she is a winner.