Write an SQL query to find the winner in each 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. Here is the DDLs and DMLs for ready use:

create table players

(player\_id int,

group\_id int)

;

insert into players values (15,1);

insert into players values (25,1);

insert into players values (30,1);

insert into players values (45,1);

insert into players values (10,2);

insert into players values (35,2);

insert into players values (50,2);

insert into players values (20,3);

insert into players values (40,3);

create table matches

(

match\_id int,

first\_player int,

second\_player int,

first\_score int,

second\_score int);

insert into matches values (1,15,45,3,0);

insert into matches values (2,30,25,1,2);

insert into matches values (3,30,15,2,0);

insert into matches values (4,40,20,5,2);

insert into matches values (5,35,50,1,1);

Table

Description automatically generated

Algo:

1. Self Join matches on players

With cte as (

Select coalesce(first\_player, second\_player) as player, sum(first\_score,second\_score) as tot\_score

From matches as m1 outer join matches as m2

On m1.first\_player = m2.second\_player )

This outputs the total score of each player.

1. Now join the above players and their score with the players table to identify their group

Select group\_id, player\_id , tot\_score, rank() over (partition by group\_id order by score desc, player\_id asc) as ranking

From cte inner join players

On cte.player = players.player\_id

1. The third and last step is to keep only the ranking=1

Select \*

From second\_step

Where ranking=1