## MySQL Winning Streak for every Player

Asked 9 years, 4 months ago Modified 9 years, 4 months ago Viewed 524 times



I have a table with winner and loser statistics from a game:









id	winner_id	loser_id
1	1	2
2	1	2
3	3	4
4	4	3
5	1	2
6	2	1
7	3	4
8	3	2
9	3	5
10	3	6
11	2	3
12	3	6
13	2	3

I want a result table where i can find the highest winning streak of every player in the game. A streak of a player is broken, when he lost a game (player\_id = loser\_id). It should look like:

player_id	win_streak	
1	3	
2	2	
3	4	
4	1	
5	0	
6	0	

I tried many queries with user defined variables etc. but i can't find a solution. Thanks!

SQL Fiddle: http://sqlfiddle.com/#!9/3da5f/1

mysql sql

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edited Aug 26, 2015 at 16:12

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asked Aug 26, 2015 at 15:43

Thanks for the link! I was wondering why it appeared in my question;) – Danny Aug 26, 2015 at 15:56

What does your table should reflect? The best winning streak or the latest? – Diego Tercero Aug 26, 2015 at 15:59

- 2 Then your desired result is wrong for your example... you should add the rest of the streaks for each players... – Jorge Campos Aug 26, 2015 at 16:07
- @Jorge Campos, you are right! My goal is the highest streak of each player. I edited the question. Danny Aug 26, 2015 at 16:10
- Well, either you're going to have to use that variable i talked about inside a mysql cursor, or in your app code. You have to do sequential agregation (count) conditional to an event that might or not happen later during your scan (a result record that might appear later might end a streak or increase the counter). Your SQL code is really going to be ugly. Better to keep your data model clean and do that counting on your app code. − Diego Tercero Aug 26, 2015 at 16:49 ✓

## 2 Answers

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**\$** 



Is this the same as Alex's approach; I'm not quite sure, except that it seems to have one distinct advantage....;-)

3



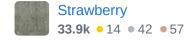


```
SELECT player_id, MAX(CASE WHEN result = 'winner' THEN running ELSE 0 END)
streak
  FROM
     ( SELECT *
            , IF(player_id =
@prev_player, IF(result=@prev_result,@i:=@i+1,@i:=1),@i:=1) running
            , @prev_result := result
            , @prev_player:=player_id
         FROM
            ( SELECT id, 'winner' result, winner_id player_id FROM my_table
              SELECT id, 'loser', loser_id FROM my_table
            ) x
            ( SELECT @i:=1,@prev_result = '',@prev_player:='' ) vars
        ORDER
           BY x.player_id
            , x.id
     ) a
 GROUP
    BY player_id;
```

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edited Aug 26, 2015 at 17:25

answered Aug 26, 2015 at 17:12



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players 5 and 6! nice one! but still not showing all streaks from all players as OP asked (in comments). +1 though – Jorge Campos Aug 26, 2015 at 18:36

@JorgeCampos you've lost me – Strawberry Aug 26, 2015 at 18:56

@JorgeCampos I've checked Strawberry's query - it works fine with my fiddle. What is your point? – Alex Aug 26, 2015 at 19:00

OP said on comments that he need ALL streaks of all players then his query gives you: 1-3; 2-2; 3-4; 4-1; 5-0; 6-0 when it should show: 1-3; 2-1; 2-2; 3-1; 3-4; 3-1; 4-1; 5-0; 6-0. Quating OP in comments: I would like to have the overall winning streak for each player after @LukeP asked – Jorge Campos Aug 26, 2015 at 19:10

1 Can you prove that in a sqlfiddle – Strawberry Aug 26, 2015 at 22:22



I guess you should better to do that on php (or any other language you use) side.

2

But just to give you some idea and as experiment and example for some unique cases (hope it could be useful somewhere)



Here is my approach:



http://sqlfiddle.com/#!9/57cc65/1

```
/
```

```
SELECT r.winner_id,
  (SELECT MAX(IF(winner_id=r.winner_id, IF(@i IS NULL, @i:=1,@i:=@i+1),
IF(loser_id = r.winner_id, @i:=0,0)))
  FROM Results r1
  WHERE r1.winner_id = r.winner_id
    OR r1.loser_id = r.winner_id
  GROUP BY IF(winner_id=r.winner_id, winner_id, loser_id)) win_streak

FROM ( SELECT winner_id
    FROM Results
  GROUP BY winner_id
  ) r
```

It returns not all ids now but only who had ever win. So to make it better, probably you have user table. If so it would simplify a query. If you have no user table you need to union all somehow users who had never win.

You are welcome if any questions.

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your query on my **result table** but the resulting win\_streak for every player is 1. I don't understand this behaviour but i am trying to fix it for my database. At the moment i have ~2000 unique players and ~110.000 results (game stats). If i am trying to update my **user table** with your streak query it is loading forever:/ — Danny Aug 26, 2015 at 18:23

Just provide your results table dataset you can pick 1,2,3 players and create the fiddle. We can figure that out then. because as you can see my query works fine with the sample you've been provided. And by the way - that is what I told you from the beginning: this kind of query has not very best performance. So you can run this query in the loop with some limitation like: WHERE winner\_id>10 AND winner\_id<=20 - Alex Aug 26, 2015 at 18:30

I'm not convinced that this query works fine - but (I think) only because there's a problem with how @i is initiated. – Strawberry Aug 26, 2015 at 20:33 /

- @Strawberry neither do I:-) But I need something from author to continue development. This is very weird question from the beginning. So I just don't want to waste extra time to order and group everything if nobody need it finally. Alex Aug 26, 2015 at 20:39
- @Alex I created a fiddle where your query is working well!  $\underline{\text{link}}$  The problem on my database (with ~2000 unique players and ~110.000 results): Every win\_streak is 1...  $\underline{\text{Danny}}$  Aug 26, 2015 at 21:16