# SQL Tasks DQL

## Basic Tasks:

1. From the following table, write a SQL query to count the number of venues. Return number of venues.
   1. soccer\_venue
   2. Sample Output:
      1. count   
         -------  
         10

select count(venue\_id) as count from soccer\_venue;

1. From the following table, write a SQL query to count the number of countries participated
   1. player\_mast
   2. Sample Output:
      1. count   
         -------  
         24

select count(country\_id) as count from Soccer\_Country;

1. From the following table, write a SQL query to find the number of goals scored
   1. goal\_details
   2. Sample Output:
      1. count   
         -------  
         108

select count(goal\_id) as count from goal\_details;

1. From the following table, write a SQL query to find the number of matches ended with a result.
   1. match\_mast
   2. Sample Output:
      1. count   
         -------  
         40

select count(results) as count from match\_mast where results <> 'DRAW';

1. From the following table, write a SQL query to find the number of matches ended with draws.
   1. match\_mast
   2. Sample Output:
      1. count   
         -------  
         11

select count(results) as count from match\_mast where results = 'DRAW';

1. From the following table, write a SQL query to find the date when the cup begins.
   1. match\_mast
   2. Sample Output:
      1. Beginning Date   
         ----------------   
         2016-06-11

select min(play\_date) as ‘Beginning Date’ from match\_mast;

1. From the following table, write a SQL query to find the number of self-goals scored
   1. goal\_details
   2. Sample Output:
      1. count   
         -------  
         3

select count(goal\_type) as count from goal\_details where goal\_type = 'O';

1. From the following table, write a SQL query to count the number of matches ended with a results in-group stage
   1. match\_mast
   2. Sample Output:
      1. count   
         -------  
         25

select count(results) as count from match\_mast where play\_stage = 'G' and results <> 'draw';

1. From the following table, write a SQL query to find the number of matches got a result by penalty shootout
   1. penalty\_shootout
   2. Sample Output:
      1. count   
         -------  
         3

select count(distinct match\_no) as count from penalty\_shootout;

1. From the following table, write a SQL query to find the number of matches decided by penalties in the Round 16.
   1. match\_mast
   2. Sample Output:
      1. count   
         -------  
         1

select count(\*) from match\_mast where decided\_by = 'P' and play\_stage = 'R';

1. From the following table, write a SQL query to find the number of goal scored in every match within normal play schedule. Sort the result-set on match number. Return match number, number of goal scored.
   1. goal\_details
   2. Sample Output:
      1. match\_no | count  
         ----------+-------  
          1 | 3  
          2 | 1  
          3 | 3  
          4 | 2

select match\_no, count(goal\_id) as count from goal\_details group by match\_no;

1. From the following table, write a SQL query to find those matches where no stoppage time added in the first half of play. Return match no, date of play, and goal scored.
   1. match\_mast
   2. Sample Output:
      1. match\_no | play\_date | goal\_score  
         ----------+------------+------------  
          4 | 2016-06-12 | 1-1

select match\_no, play\_date, goal\_score from match\_mast where stop1\_sec = '0.0';

1. From the following table, write a SQL query to count the number of matches ending with a goalless draw in-group stage of play. Return number of matches.
   1. match\_details
   2. Sample Output:
      1. count   
         -------  
         4

select count(distinct match\_no) as count from match\_details where goal\_score = '0.0' and win\_lose = 'D' and play\_stage = 'G';

1. From the following table, write a SQL query to count the number of matches ending with only one goal win, except those matches, which was decided by penalty shoot-out. Return number of matches
   1. match\_details
   2. Sample Output:
      1. count   
         -------  
         13

select count(goal\_score) from match\_details where win\_lose = 'W' and goal\_score = 1 and decided\_by <> 'P';

1. From the following table, write a SQL query to count the number of players replaced in the tournament. Return number of players as "Player Replaced"
   1. player\_in\_out
   2. Sample Output:
      1. Player Replaced  
         -----------------  
          293

select count(\*) as ‘Player Replaced’ from player\_in\_out where in\_out = 'I';

1. From the following table, write a SQL query to count the total number of players replaced within normal time of play. Return number of players as "Player Replaced".
   1. player\_in\_out
   2. Sample Output:
      1. Player Replaced  
         -----------------  
          275

select count(\*) as ‘Player Replaced’ from player\_in\_out where in\_out = 'I' and play\_schedule = 'NT';

1. From the following table, write a SQL query to count the number of players replaced in the stoppage time. Return number of players as "Player Replaced"
   1. player\_in\_out
   2. Sample Output:
      1. Player Replaced  
         -----------------  
          9

select count(\*) as ‘Player Replaced’ from player\_in\_out where in\_out = 'I' and play\_schedule = 'ST';

1. From the following table, write a SQL query to count the total number of players replaced in the first half of play. Return number of players as "Player Replaced".
   1. player\_in\_out
   2. Sample Output:
      1. count  
         --------  
          3

select count(\*) as ‘Player Replaced’ from player\_in\_out where in\_out = 'I' and play\_schedule = 'NT' and play\_half = '1.0';

1. From the following table, write a SQL query to count the total number of goalless draws have there in the entire tournament. Return number of goalless draws.
   1. player\_in\_out
   2. Sample Output:
      1. count  
         --------   
          4

select count(distinct match\_no) from match\_details where win\_lose = 'D' and goal\_score = '0.0';

1. From the following table, write a SQL query to count the total number of players replaced in the extra time of play
   1. player\_in\_out
   2. Sample Output:
      1. count  
         --------   
          9

select count(\*) as ‘Player Replaced’ from player\_in\_out where in\_out = 'I' and play\_schedule = 'ET';

1. From the following table, write a SQL query to count the number of shots taken in penalty shootout matches. Number of shots as "Number of Penalty Kicks"
   1. penalty\_shootout
   2. Sample Output:
      1. Number of Penalty Kicks  
         --------------------------------   
          37

select count(kick\_id) as ‘Number of Penalty Kicks’ from penalty\_shootout;

1. From the following table, write a SQL query to count the number of shots scored goal in penalty shootout matches. Return number of shots scored goal as "Goal Scored by Penalty Kicks"
   1. penalty\_shootout
   2. Sample Output:
      1. Goal Scored by Penalty Kicks  
         --------------------------------------   
          28

select count(kick\_id) from penalty\_shootout where score\_goal = 'Y';

1. From the following table, write a SQL query to count the number of shots missed or saved in penalty shootout matches. Return number of shots missed as "Goal missed or saved by Penalty Kicks"
   1. penalty\_shootout
   2. Sample Output:
      1. Goal missed or saved by Penalty Kicks  
         --------------------------------------------------   
          9

select count(score\_goal) as ‘Goal missed or saved by Penalty Kicks’ from penalty\_shootout where score\_goal = 'N';

1. From the following tables, write a SQL query to find the players with shot number they taken in penalty shootout matches. Return match\_no, Team, player\_name, jersey\_no, score\_goal, kick\_no
   1. soccer\_country, penalty\_shootout, player\_mast
   2. Sample Output:
      1. match\_no | Team | player\_name | jersey\_no | score\_goal | kick\_no  
         ----------+-------------+-------------------------+-----------+------------+---------  
          37 | Switzerland | Stephan Lichtsteiner | 2 | Y | 1  
          37 | Poland | Robert Lewandowski | 9 | Y | 2  
          37 | Switzerland | Granit Xhaka | 10 | N | 3  
          37 | Poland | Arkadiusz Milik | 7 | Y | 4

select match\_no, country\_name as Team, player\_name, jersey\_no, score\_goal, kick\_no from penalty\_shootout left join player\_mast on player\_mast.player\_id = penalty\_shootout.player\_id join Soccer\_Country on player\_mast.team\_id = Soccer\_Country.country\_id;

1. From the following tables, write a SQL query to count the number of penalty shots taken by the teams. Return country name, number of shots as "Number of Shots"
   1. soccer\_country, penalty\_shootout
   2. Sample Output:
      1. country\_name | Number of Shots  
         --------------+-----------------  
          Poland | 9  
          Italy | 9  
          Germany | 9  
          Portugal | 5  
          Switzerland | 5

select country\_name, count(kick\_id) as 'Number of Shots' from Soccer\_Country join penalty\_shootout on team\_id = country\_id group by country\_id;

1. From the following table, write a SQL query to count the number of booking happened in each half of play within normal play schedule. Return play\_half, play\_schedule, number of booking happened
   1. player\_booked
   2. Sample Output:
      1. play\_half | play\_schedule | count  
         -----------+---------------+-------  
          1 | NT | 61  
          2 | NT | 123

select play\_half, play\_schedule, count(ID) as count from player\_booked where play\_schedule = 'NT' group by play\_half;

1. From the following table, write a SQL query to count the number of booking happened in stoppage time.
   1. player\_booked
   2. Sample Output:
      1. count  
         --------  
          10

select count(ID) as count from player\_booked where play\_schedule = 'ST';

1. From the following table, write a SQL query to count the number of booking happened in extra time
   1. player\_booked
   2. Sample Output:
      1. count  
         --------  
          7

select count(ID) as count from player\_booked where play\_schedule = 'ET';

## Subquery Tasks

1. From the following tables, write a SQL query to find the teams played the first match of cup. Return match number, country name
   1. match\_details, soccer\_country
   2. Sample Output:
      1. match\_no | country\_name  
         ----------+--------------  
          1 | France  
          1 | Romania

select match\_no, (select country\_name from Soccer\_Country where Soccer\_Country.country\_id = match\_details.team\_id) from match\_details where match\_no = 1.0;

1. From the following tables, write a SQL query to find the winner of EURO cup 2016. Return country name
   1. soccer\_country, match\_details
   2. Sample Output:
      1. team  
         ----------  
          Portugal

select country\_name as 'team' from Soccer\_Country where country\_id in (select team\_id from match\_details where match\_no = 51.0 and win\_lose = 'W');

1. From the following table, write a SQL query to find the most watched match in the world. Return match\_no, play\_stage, goal\_score, audience
   1. match\_mast
   2. Sample Output:
      1. match\_no | play\_stage | goal\_score | audence  
         ----------+------------+------------+---------  
          48 | Q | 5-2 | 76833

select match\_no, play\_stage, goal\_score, audence from match\_mast order by audence desc limit 1;

1. From the following tables, write a SQL query to find the match number in which Germany played against Poland. Group the result set on match number. Return match number
   1. match\_details, soccer\_country
   2. Sample Output:
      1. match\_no  
         ----------  
          18

select match\_no from match\_details where team\_id in (select Soccer\_Country.country\_id from Soccer\_Country where Soccer\_Country.country\_name = 'Germany' or country\_name = 'Poland') group by match\_no order by (select count(match\_no)) desc limit 1;

1. From the following tables, write a SQL query to find the result of the match where Portugal played against Hungary. Return match\_no, play\_stage, play\_date, results, goal\_score.
   1. match\_mast, match\_details, soccer\_country
   2. Sample Output:
      1. match\_no | play\_stage | play\_date | results | goal\_score  
         ----------+------------+------------+---------+------------  
          34 | G | 2016-06-22 | DRAW | 3-3

select match\_no, play\_stage, (select play\_date from match\_mast where match\_mast.match\_no = match\_details.match\_no), (select results from match\_mast where match\_mast.match\_no = match\_details.match\_no) , goal\_score from match\_details where team\_id in (select country\_id from Soccer\_Country where country\_name = 'Hungary' or country\_name = 'Portugal') group by match\_no order by (select count(match\_details.match\_no)) desc limit 1;

1. From the following tables, write a SQL query to find those players who scored number of goals in every match. Group the result set on match number, country name and player name. Sort the result-set in ascending order by match number. Return match number, country name, player name and number of matches
   1. goal\_details, soccer\_country, player\_mast
   2. Sample Output:
      1. match\_no | country\_name | player\_name | count  
         ----------+---------------------+-------------------------+-------  
          1 | France | Dimitri Payet | 1  
          1 | France | Olivier Giroud | 1  
          1 | Romania | Bogdan Stancu | 1  
          2 | Switzerland | Fabian Schar | 1

select match\_no, (select country\_name from Soccer\_Country where country\_id = goal\_details.team\_id), (select player\_name from player\_mast where player\_mast.player\_id =goal\_details.player\_id), count(player\_id) from goal\_details group by match\_no, team\_id, player\_id;

1. From the following tables, write a SQL query to find the highest audience match. Return country name of the teams
   1. soccer\_country, goal\_details, match\_mast
   2. Sample Output:
      1. country\_name  
         --------------  
          France  
          Iceland

select country\_name from Soccer\_Country where country\_id in (select team\_id from goal\_details where team\_id in (select team\_id from goal\_details where match\_no in (select match\_no from match\_mast where audence in (select max(audence) from match\_mast))));

1. From the following tables, write a SQL query to find the player who scored the last goal for Portugal against Hungary. Return player name
   1. player\_mast, goal\_details, match\_details, soccer\_country
   2. Sample Output:
      1. player\_name  
         --------------------  
          Cristiano Ronaldo

select player\_name from player\_mast where player\_id in (select player\_id from goal\_details where match\_no in (select match\_no from goal\_details where team\_id in (select country\_id from Soccer\_Country where country\_name = 'Hungary'))and goal\_id in (select max(goal\_id) from goal\_details where match\_no in (select match\_no from goal\_details where team\_id in (select country\_id from Soccer\_Country where country\_name = 'Hungary') ))) and team\_id in (select country\_id from Soccer\_Country where country\_name = 'Portugal');

1. From the following table, write a SQL query to find the second-highest stoppage time, which had been added, in the second half of play
   1. match\_mast
   2. Sample Output:
      1. max  
         -----  
          374

select stop2\_sec from match\_mast order by stop2\_sec desc limit 1,1;

1. From the following tables, write a SQL query to find the teams played the match where second highest stoppage time had been added in second half of play. Return country name of the teams
   1. soccer\_country, match\_details, match\_mast
   2. Sample Output:
      1. country\_name  
         --------------  
          Albania  
          France

select country\_name from Soccer\_Country where country\_id in(select team\_id from match\_details where match\_no in( select match\_no from match\_mast where stop2\_sec=( select max(stop2\_sec) from match\_mast where stop2\_sec not in( select max(stop2\_sec) from match\_mast))));

1. From the following table, write a SQL query to find the teams played the match where second highest stoppage time had been added in second half of play. Return match\_no, play\_date, stop2\_sec
   1. match\_mast
   2. Sample Output:
      1. match\_no | play\_date | stop2\_sec  
         ----------+------------+-----------  
          15 | 2016-06-16 | 374
2. (12) From the following tables, write a SQL query to find the team, which was defeated by Portugal in EURO cup 2016 final. Return the country name of the team
   1. soccer\_country, match\_details
   2. Sample Output:
      1. country\_name  
         --------------  
          France

select country\_name from Soccer\_Country where country\_id in (select team\_id from match\_details where match\_no in (select max(match\_no) from match\_details) and win\_lose = 'L');

## Join Tasks

1. From the following tables, write a SQL query to find the venue where EURO cup 2016 final match held. Return venue name, city
   1. soccer\_venue, soccer\_city, match\_mast
   2. Sample Output:
      1. venue\_name | city  
         -----------------+-------------  
          Stade de France | Saint-Denis

select soccer\_venue.venue\_name, Soccer\_city.city from match\_mast join soccer\_venue on soccer\_venue.venue\_id = match\_mast.venue\_id join Soccer\_city on Soccer\_city.city\_id = soccer\_venue.city\_id order by play\_date desc limit 1;

1. From the following tables, write a SQL query to find the number of goal scored by each team in every match within normal play schedule. Return match number, country name and goal score
   1. match\_details, soccer\_country
   2. Sample Output:
      1. match\_no | country\_name | goal\_score  
         ----------+---------------------+------------  
          1 | France | 2  
          1 | Romania | 1  
          2 | Albania | 0  
          2 | Switzerland | 1  
          .....

select match\_no, country\_name, goal\_score from Soccer\_Country join match\_details on match\_details.team\_id = Soccer\_Country.country\_id group by country\_name order by match\_no, country\_name;

1. From the following tables, write a SQL query to count the number of goals scored by each player within normal play schedule. Group the result set on player name and country name and sorts the result-set according to the highest to the lowest scorer. Return player name, number of goals and country name
   1. goal\_details, player\_mast, soccer\_country
   2. Sample Output:
      1. player\_name | count | country\_name  
         -------------------------+-------+---------------------  
          Antoine Griezmann | 5 | France  
          Cristiano Ronaldo | 3 | Portugal  
          Gareth Bale | 3 | Wales  
          Olivier Giroud | 3 | France  
          .....

select player\_mast.player\_name, count(goal\_details.goal\_id) count, Soccer\_Country.country\_name from player\_mast join goal\_details on goal\_details.player\_id = player\_mast.player\_id join Soccer\_Country on Soccer\_Country.country\_id = player\_mast.team\_id where goal\_details.goal\_schedule = 'NT' group by player\_name order by count desc;

1. From the following tables, write a SQL query to find the highest individual scorer in the cup. Return player name, country name and highest individual scorer
   1. goal\_details, player\_mast, soccer\_country
   2. Sample Output:
      1. player\_name | country\_name | count  
         --------------------+--------------+-------  
          Antoine Griezmann | France | 6

select player\_mast.player\_name, count(goal\_details.goal\_id) count, Soccer\_Country.country\_name from player\_mast join goal\_details on goal\_details.player\_id = player\_mast.player\_id join Soccer\_Country on Soccer\_Country.country\_id = player\_mast.team\_id group by player\_name order by count desc limit 1;

1. From the following tables, write a SQL query to find the scorer in the final. Return player name, jersey number and country name
   1. goal\_details, player\_mast, soccer\_country
   2. Sample Output:
      1. player\_name | jersey\_no | country\_name  
         -------------+-----------+--------------  
          Eder | 9 | Portugal

select player\_mast.player\_name, player\_mast.jersey\_no, Soccer\_Country.country\_name from player\_mast join goal\_details on goal\_details.player\_id = player\_mast.player\_id join Soccer\_Country on Soccer\_Country.country\_id = player\_mast.team\_id order by goal\_details.match\_no desc limit 1;

1. From the following tables, write a SQL query to find the country where Football cup held. Return country name
   1. soccer\_country, soccer\_city, soccer\_venue
   2. Sample Output:
      1. country\_name  
         --------------  
          France

select country\_name from Soccer\_Country join Soccer\_city on Soccer\_Country.country\_id = Soccer\_city.country\_id join soccer\_venue on soccer\_venue.city\_id = Soccer\_city.city\_id group by country\_name;

1. From the following tables, write a SQL query to find the player who scored first goal of EURO cup 2016. Return player\_name, jersey\_no, country\_name, goal\_time, play\_stage, goal\_schedule, goal\_half
   1. soccer\_country, player\_mast, goal\_details
   2. Sample Output:
      1. player\_name | jersey\_no | country\_name | goal\_time | play\_stage | goal\_schedule | goal\_half  
         -----------------+-----------+--------------+-----------+------------+---------------+-----------  
         Olivier Giroud | 9 | France | 57 | G | NT | 2

select player\_mast.player\_name, player\_mast.jersey\_no, Soccer\_Country.country\_name, goal\_details.goal\_time, goal\_details.play\_stage, goal\_details.goal\_schedule, goal\_details.goal\_half from player\_mast join Soccer\_Country on Soccer\_Country.country\_id = player\_mast.team\_id join goal\_details on goal\_details.player\_id = player\_mast.player\_id order by goal\_details.match\_no, goal\_details.goal\_time limit 1;

1. From the following tables, write a SQL query to find the referee who managed the opening match. Return referee name, country name
   1. soccer\_country, match\_mast, referee\_mast
   2. Sample Output:
      1. referee\_name | country\_name  
         ---------------+--------------  
          Viktor Kassai | Hungary

select referee\_mast.referee\_name, Soccer\_Country.country\_name from referee\_mast join match\_mast on referee\_mast.referee\_id = match\_mast.referee\_id join Soccer\_Country on referee\_mast.country\_id = Soccer\_Country.country\_id where match\_mast.match\_no = 1;

1. From the following tables, write a SQL query to find the referee who managed the final match. Return referee name, country name
   1. soccer\_country, match\_mast, referee\_mast
   2. Sample Output:
      1. referee\_name | country\_name  
         ------------------+--------------  
          Mark Clattenburg | England

select referee\_mast.referee\_name, Soccer\_Country.country\_name from referee\_mast join match\_mast on referee\_mast.referee\_id = match\_mast.referee\_id join Soccer\_Country on referee\_mast.country\_id = Soccer\_Country.country\_id where match\_mast.match\_no in (select max(match\_no) from match\_mast);

1. From the following tables, write a SQL query to find the referee who assisted the referee in the opening match. Return associated referee name, country name
   1. asst\_referee\_mast, soccer\_country, match\_details
   2. Sample Output:
      1. ass\_ref\_name | country\_name  
         --------------+--------------  
          Gyorgy Ring | Hungary  
          Vencel Toth | Hungary

select asst\_referee\_mast.ass\_ref\_name, Soccer\_Country.country\_name from asst\_referee\_mast join match\_details on asst\_referee\_mast.ass\_ref\_id = match\_details.ass\_ref join Soccer\_Country on asst\_referee\_mast.country\_id = Soccer\_Country.country\_id where match\_details.match\_no = 1;