Data Engineering Bootcamp
Advanced SQL Mini-Project

Euro Cup Data Analysis

Estimated Time: 3-5 hours

In this project, you'll look at Euro Cup 2016 data and write queries to answer our questions.

The data can be downloaded here (for Linux and MacOS users) and here (for Windows Users). Please extract the ZIP archive downloaded to a folder and import data contained in the CSV files to a database using the following steps:

1. Create a new database named euro_cup_2016 :

   ```
   mysql> CREATE SCHEMA euro_cup_2016;
   ```

2. Follow the instructions as given in the documentation to import the CSV files from the ZIP archive into the database.
   Please use the database name that you created above (when in step as shown in figure Figure 6.16 in the documentation).
   Please configure the table names same as the CSV file names.

The data model for the data can be found here. In order to understand the content of the tables and what data each column contains, please refer to this document.

You'll find the queries to write on the next page.

Please answer write the following queries:

1. Write a SQL query to find the date EURO Cup 2016 started on.
2. Write a SQL query to find the number of matches that were won by penalty shootout.
3. Write a SQL query to find the match number, date, and score for matches in which no stoppage time was added in the 1st half.
4. Write a SQL query to compute a list showing the number of substitutions that happened in various stages of play for the entire tournament.
5. Write a SQL query to find the number of bookings that happened in stoppage time.
6. Write a SQL query to find the number of matches that were won by a single point, but do not include matches decided by penalty shootout.
7. Write a SQL query to find all the venues where matches with penalty shootouts were played.
8. Write a SQL query to find the match number for the game with the highest number of penalty shots, and which countries played that match.
9. Write a SQL query to find the goalkeeper's name and jersey number, playing for Germany, who played in Germany's group stage matches.
10. Write a SQL query to find all available information about the players under contract to Liverpool F.C. playing for England in EURO Cup 2016.
11. Write a SQL query to find the players, their jersey number, and playing club who were the goalkeepers for England in EURO Cup 2016.
12. Write a SQL query that returns the total number of goals scored by each position on each country's team. Do not include positions which scored no goals.
13. Write a SQL query to find all the defenders who scored a goal for their teams.
14. Write a SQL query to find referees and the number of bookings they made for the entire tournament. Sort your answer by the number of bookings in descending order.
15. Write a SQL query to find the referees who booked the most number of players.
16. Write a SQL query to find referees and the number of matches they worked in each venue.
17. Write a SQL query to find the country where the most assistant referees come from, and the count of the assistant referees.
18. Write a SQL query to find the highest number of foul cards given in one match.
19. Write a SQL query to find the number of captains who were also goalkeepers.
20. Write a SQL query to find the substitute players who came into the field in the first half of play, within a normal play schedule.

Deliverables:

1. Upload to github individual SQL scripts with solutions to each question listed above
    a. The SQL file naming convention is sql_q<question number>_sol.sql (e.g.- sql_q1_sol.sql, sql_q2_sol.sql, etc.)