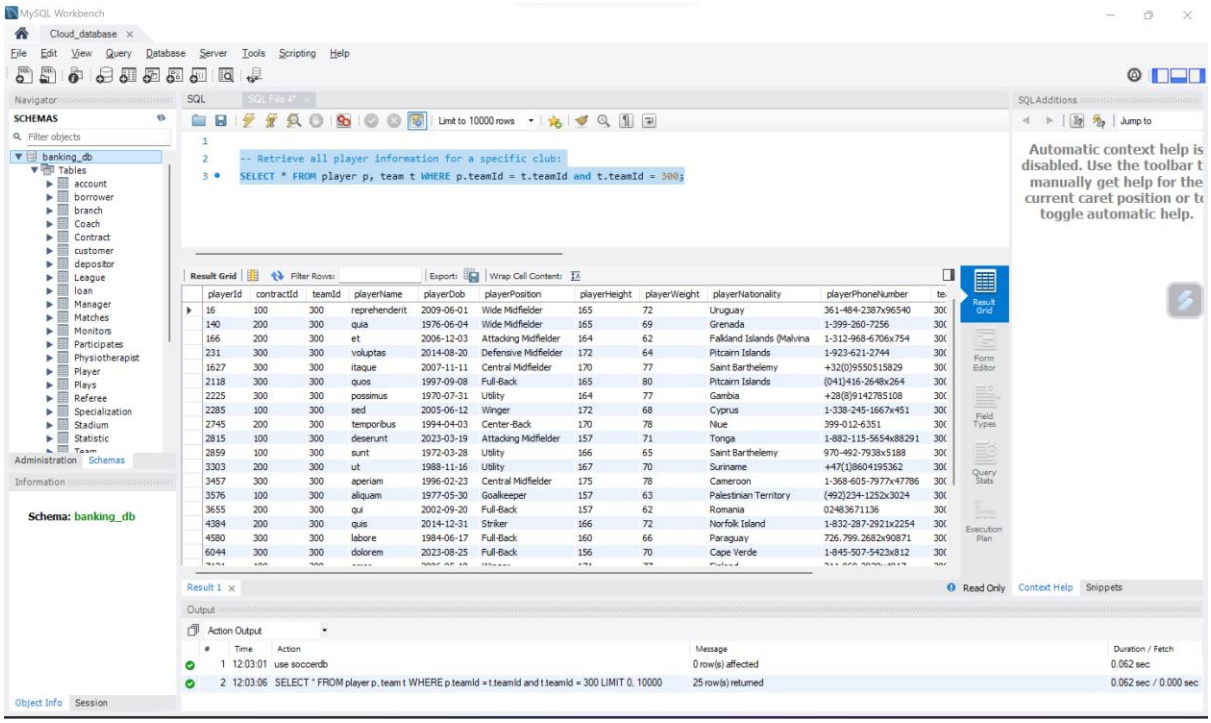
**Executing & testing the Soccer Management System database:**

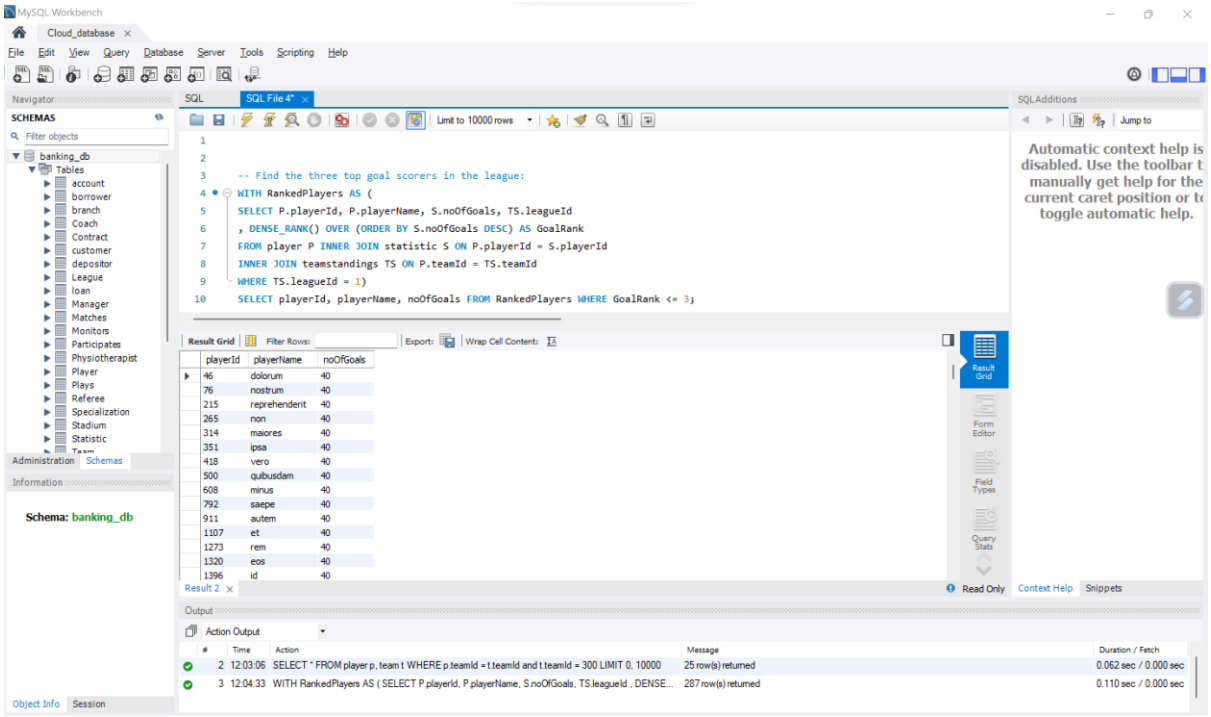
**Retrieve all player information for a specific club:**

SELECT * FROM player p, team t WHERE p.teamId = t.teamId and **t.teamId = 300**;



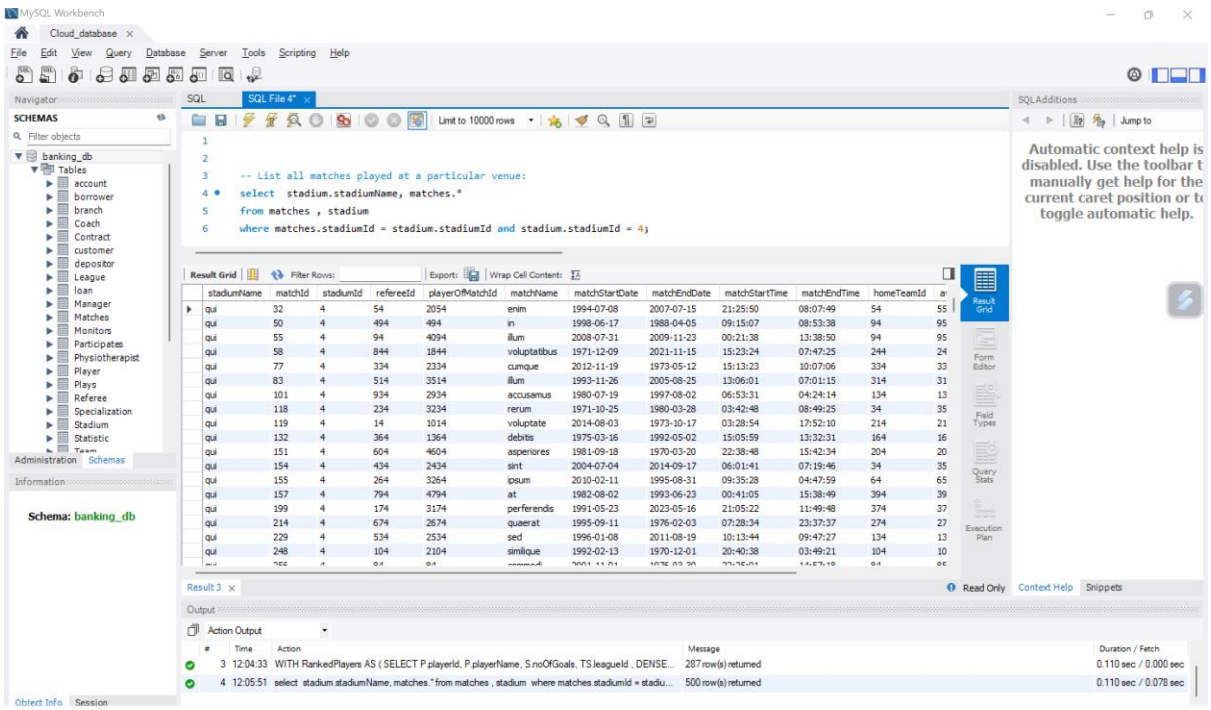

**Find the three top goal scorers in the league:**

WITH RankedPlayers AS (
SELECT P.playerId, P.playerName, S.noOfGoals, TS.leagueId
, DENSE_RANK() OVER (ORDER BY S.noOfGoals DESC) AS GoalRank
FROM player P INNER JOIN statistic S ON P.playerId = S.playerId
INNER JOIN teamstandings TS ON P.teamId = TS.teamId
WHERE **TS.leagueId = 1**)
SELECT playerId, playerName, noOfGoals FROM RankedPlayers WHERE GoalRank <= 3;



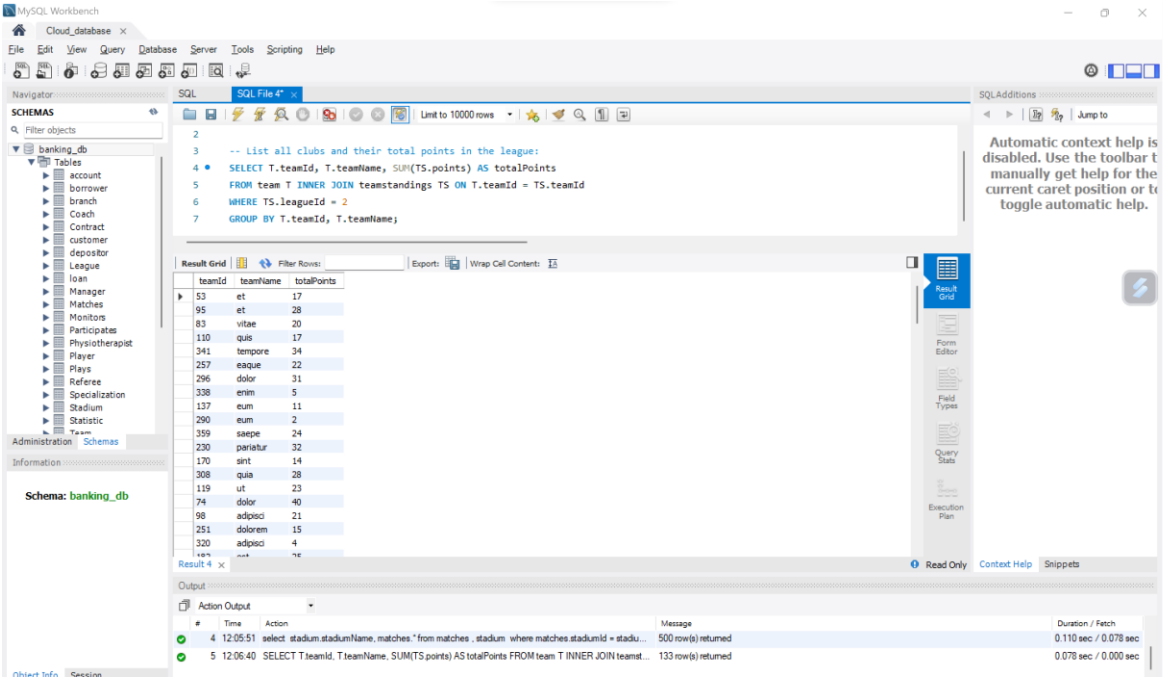

**List all matches played at a particular venue:**

select  stadium.stadiumName, matches.*
from matches , stadium
where matches.stadiumId = stadium.stadiumId and **stadium.stadiumId = 4;**



**List all clubs and their total points in the league:**

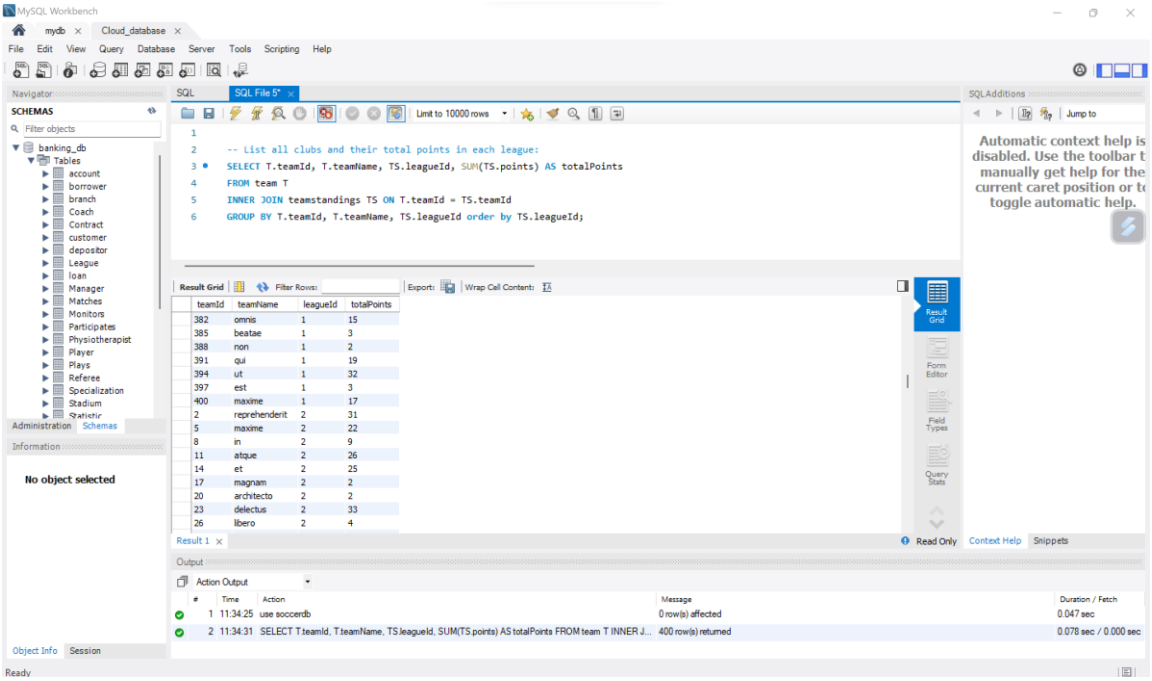
SELECT T.teamId, T.teamName, SUM(TS.points) AS totalPoints
FROM team T INNER JOIN teamstandings TS ON T.teamId = TS.teamId
WHERE **TS.leagueId = 2** -- Particular League
GROUP BY T.teamId, T.teamName;




**List all clubs and their total points in each league:**

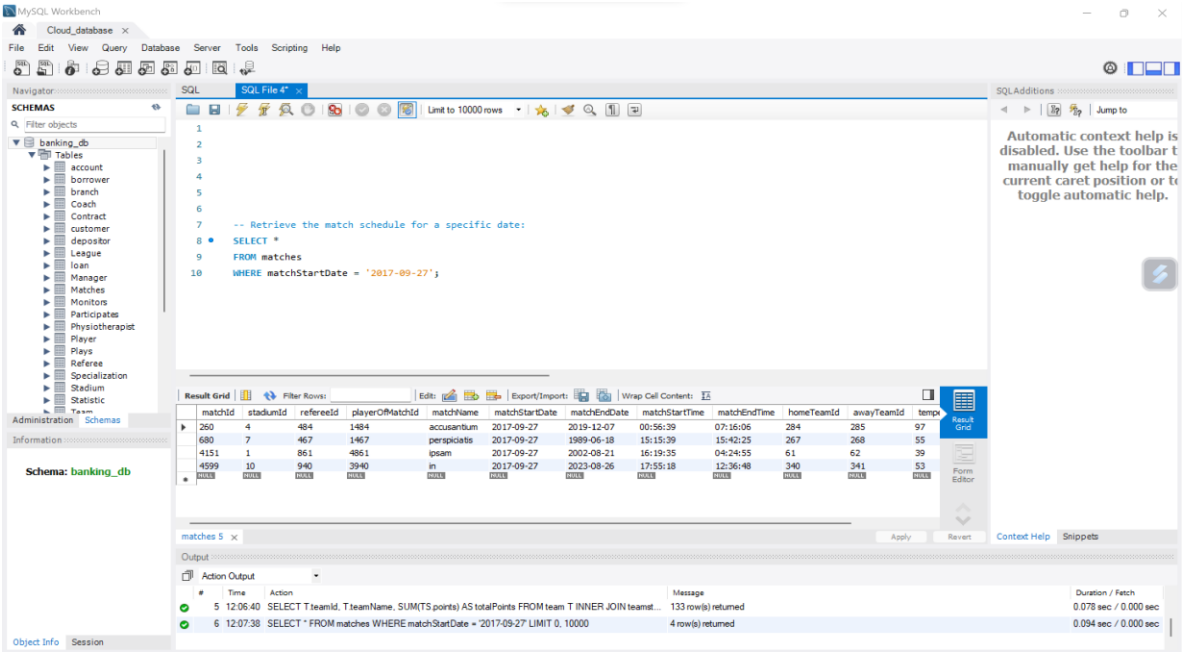
SELECT T.teamId, T.teamName, TS.leagueId, SUM(TS.points) AS totalPoints

FROM team T INNER JOIN teamstandings TS ON T.teamId = TS.teamId
**GROUP BY T.teamId, T.teamName, TS.leagueId** order by TS.leagueId;



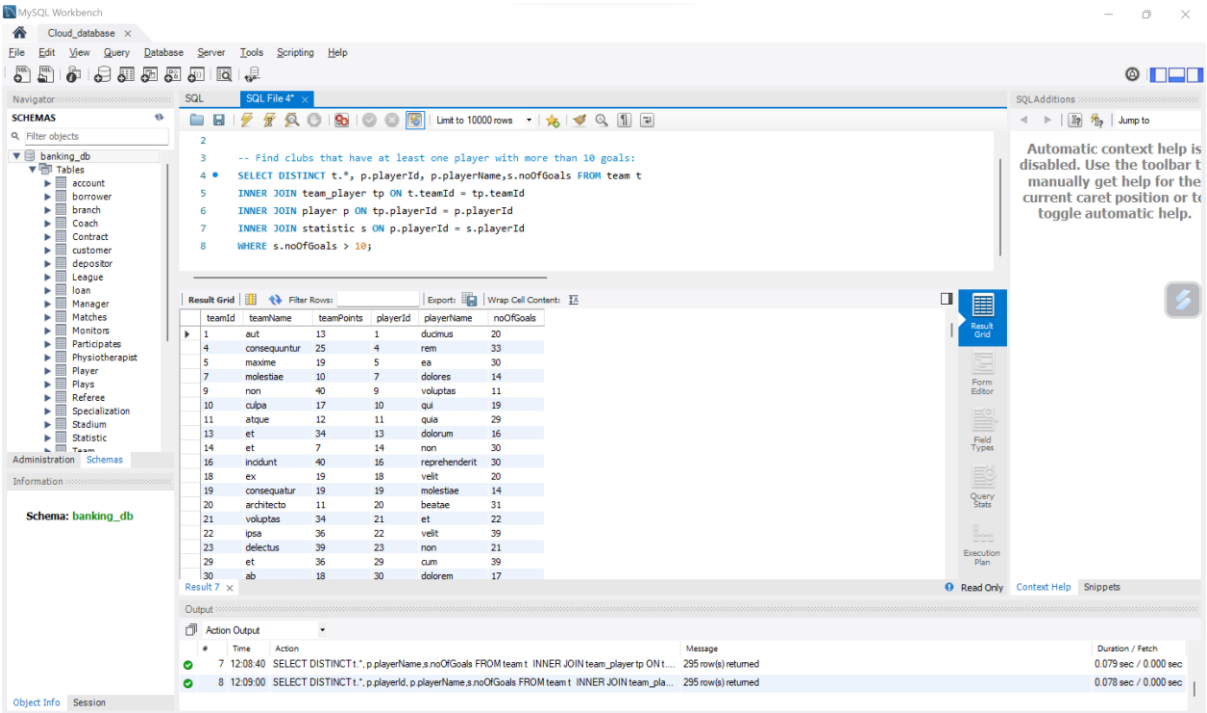
**Retrieve the match schedule for a specific date:**

```
SELECT *
FROM matches
WHERE matchStartDate = '2017-09-27';
```



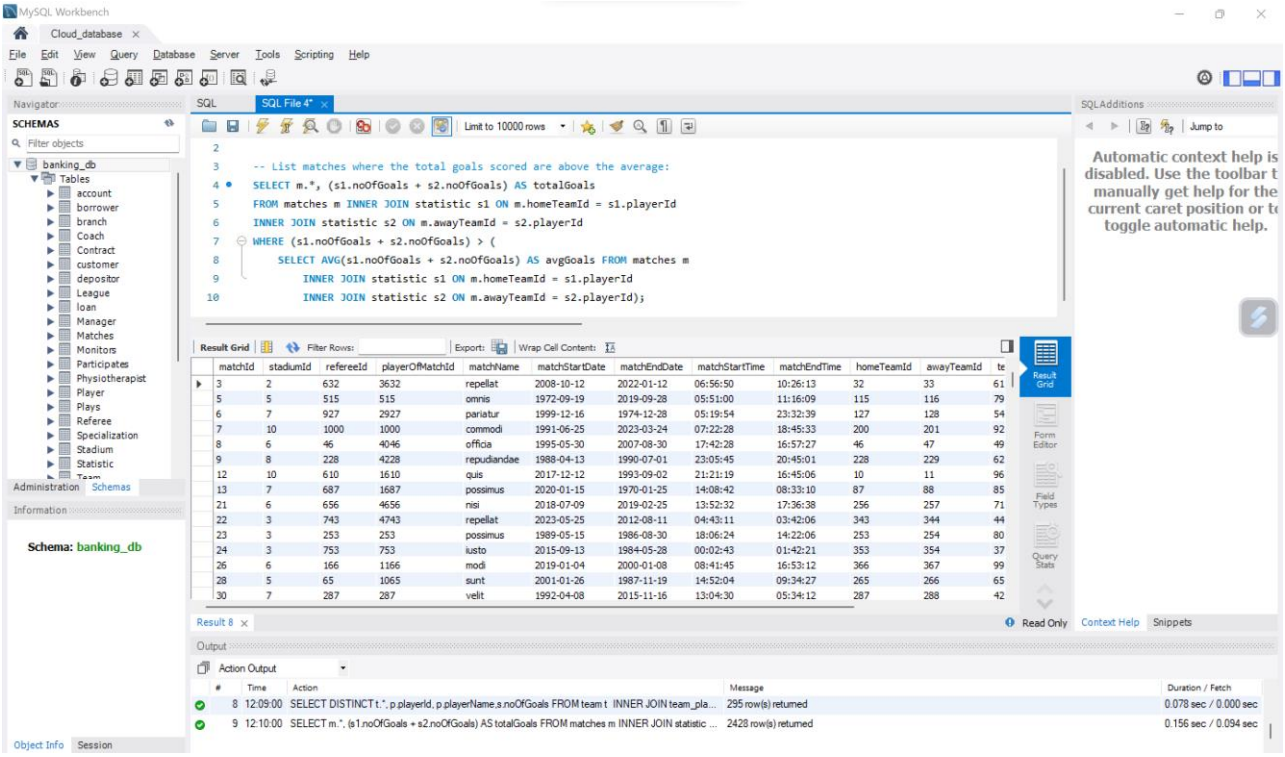
**Find clubs that have at least one player with more than 10 goals:**

```
SELECT DISTINCT t.*, p.playerId, p.playerName,s.noOfGoals FROM team t
INNER JOIN team_player tp ON t.teamId = tp.teamId
INNER JOIN player p ON tp.playerId = p.playerId
INNER JOIN statistic s ON p.playerId = s.playerId
WHERE s.noOfGoals > 10;
```



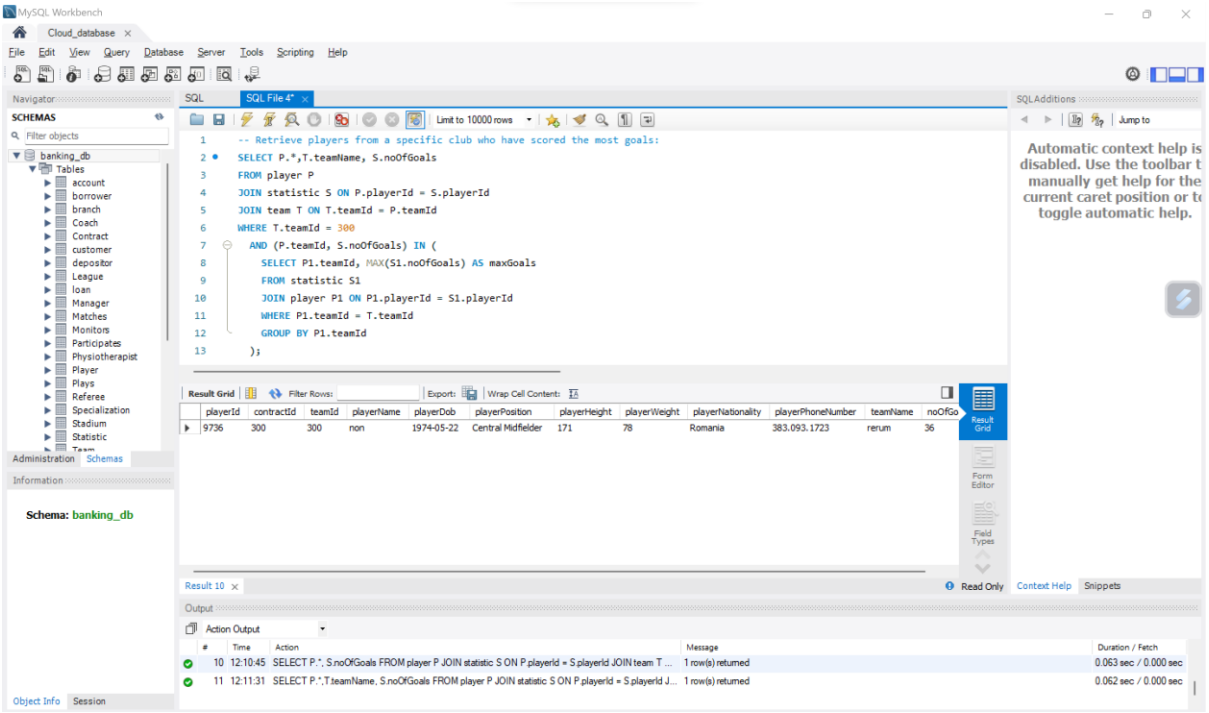
**List matches where the total goals scored are above the average:**

```
SELECT m.*, (s1.noOfGoals + s2.noOfGoals) AS totalGoals
FROM matches m INNER JOIN statistic s1 ON m.homeTeamId = s1.playerId
INNER JOIN statistic s2 ON m.awayTeamId = s2.playerId
WHERE (s1.noOfGoals + s2.noOfGoals) > (
        SELECT AVG(s1.noOfGoals + s2.noOfGoals) AS avgGoals FROM matches m
      INNER JOIN statistic s1 ON m.homeTeamId = s1.playerId
      INNER JOIN statistic s2 ON m.awayTeamId = s2.playerId);
```



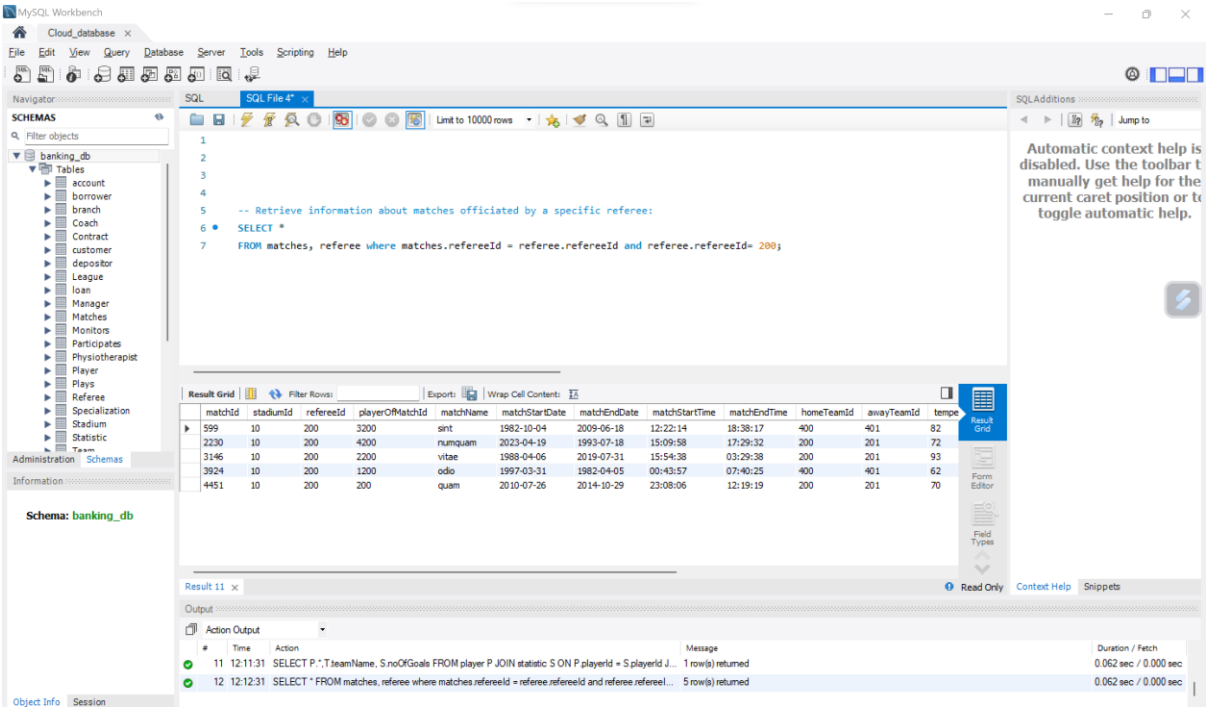

**Retrieve players from a specific club who have scored the most goals:**

```
SELECT P.*,T.teamName, S.noOfGoals
FROM player P
JOIN statistic S ON P.playerId = S.playerId
JOIN team T ON T.teamId = P.teamId
WHERE T.teamId = 300
  AND (P.teamId, S.noOfGoals) IN (
    SELECT P1.teamId, MAX(S1.noOfGoals) AS maxGoals
    FROM statistic S1
    JOIN player P1 ON P1.playerId = S1.playerId
    WHERE P1.teamId = T.teamId
    GROUP BY P1.teamId
  );
```




**Retrieve information about matches officiated by a specific referee:**

SELECT *
FROM matches, referee where matches.refereeId = referee.refereeId and **referee.refereeId= 200;**



**List all matches played at a specific venue within a certain date range:**

select stadium.stadiumName , matches.*
from matches , stadium
where **matches.matchStartDate between '1995-08-15' and '2022-10-15'** and
matches.stadiumId = stadium.stadiumId and **stadium.stadiumId = 7;**