

SQL Exercise: CASE Statements Comparing Column Values - Step 3

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Daily XP 170

Exercise

CASE statements comparing column values

Barcelona is considered one of the strongest teams in Spain's soccer league.

In this exercise, you will be creating a list of matches in the 2011/2012 season where Barcelona was the *home team*. You will do this using a `CASE` statement that compares the values of two columns to create a new group -- wins, losses, and ties.

In 3 steps, you will build a query that identifies a match's winner, identifies the identity of the opponent, and finally filters for Barcelona as the home team. Completing a query in this order will allow you to watch your results take shape with each new piece of information.

The `matches_spain` table currently contains Barcelona's matches from the 2011/2012 season, and has two key columns, `hometeam_id` and `awayteam_id`, that can be joined with the `teams_spain` table. However, you can only join `teams_spain` to one column at a time.

Instructions 3/3

30 XP

3

- Complete the same `CASE` statement as the previous steps.
- Filter for matches where the home team is *FC Barcelona* (id = 8634).

Take Hint (-9 XP)

query.sql

```
1 SELECT
2   m.date,
3   t.team_long_name AS opponent,
4   -- Complete the CASE statement with an alias
5   m.home_goal,
6   m.home_goal,
7   'Tie' AS outcome
8 FROM matches_spain AS m
9 LEFT JOIN teams_spain AS t
10 ON m.awayteam_id = t.team_api_id
11 -- Filter for Barcelona as the home team
12 WHERE m.hometeam_id = 8634;
```

query result

matches_spain

teams_spain

date	opponent	outcome
2012-01-21	Atlético Madrid	Home loss :(
2012-01-22	Athletic Club de Bilbao	Home win!
2012-01-22	FC Barcelona	Home loss :(
2012-01-23	Real Sporting de Gijón	Home win!
2012-01-21	Sevilla FC	Tie
2012-01-22	Valencia CF	Tie
2012-01-21	Getafe CF	Home loss :(
2012-01-21	Granada CF	Home win!
2012-01-22	Real Zaragoza	Tie

Showing 100 out of 380 rows

Question: Complete the same CASE statement as the previous steps. Filter for matches where the home team is FC Barcelona (id = 8634).

Correct Answer:

SQL Query:

```
SELECT
  m.date,
  t.team_long_name AS opponent,
  CASE
    WHEN m.home_goal > a.home_goal THEN 'Home win!'
    WHEN m.home_goal < a.home_goal THEN 'Home loss :(
```

```
        WHEN m.home_goal > m.away_goal THEN 'Barcelona win!'
        WHEN m.home_goal < m.away_goal THEN 'Barcelona loss :('
        ELSE 'Tie'
    END AS outcome
FROM matches_spain AS m
LEFT JOIN teams_spain AS t
ON m.awayteam_id = t.team_api_id
WHERE m.hometeam_id = 8634;
```

Explanation:

- The query selects the 'date' of each match, the name of the opponent team, and the match outcome.
- The 'team_long_name' column from 'teams_spain' is joined using 'awayteam_id' and aliased as 'opponent'.
- The CASE statement categorizes match outcomes as 'Barcelona win!', 'Barcelona loss :(', or 'Tie'.
- The WHERE clause filters for matches where FC Barcelona (hometeam_id = 8634) is the home team.
- This query outputs all matches played by FC Barcelona as the home team in the given dataset.