# Putting the CTEs Together for Manchester United Matches

## Question

Combine the previously created CTEs for home and away teams into a single query to extract all matches played by Manchester United during the 2014/2015 English Premier League season. Use the CTEs to determine the home and away teams, as well as the goals scored and outcomes of each match.

## Corrected SQL Query

-- Set up the home team CTE  
WITH home AS (  
 SELECT   
 m.id,   
 t.team\_long\_name AS home\_team,  
 CASE   
 WHEN m.home\_goal > m.away\_goal THEN 'MU Win'  
 WHEN m.home\_goal < m.away\_goal THEN 'MU Loss'  
 ELSE 'Tie'  
 END AS outcome  
 FROM match AS m  
 LEFT JOIN team AS t   
 ON m.hometeam\_id = t.team\_api\_id  
),  
-- Set up the away team CTE  
away AS (  
 SELECT   
 m.id,   
 t.team\_long\_name AS away\_team,  
 CASE   
 WHEN m.home\_goal < m.away\_goal THEN 'MU Win'  
 WHEN m.home\_goal > m.away\_goal THEN 'MU Loss'  
 ELSE 'Tie'  
 END AS outcome  
 FROM match AS m  
 LEFT JOIN team AS t   
 ON m.awayteam\_id = t.team\_api\_id  
)  
-- Select team names, the date, and goals  
SELECT DISTINCT   
 m.date,  
 home.home\_team,  
 away.away\_team,  
 m.home\_goal,  
 m.away\_goal  
FROM match AS m  
-- Join the CTEs onto the match table  
LEFT JOIN home ON m.id = home.id  
LEFT JOIN away ON m.id = away.id  
WHERE m.season = '2014/2015'  
 AND (home.home\_team = 'Manchester United'   
 OR away.away\_team = 'Manchester United');

## Explanation

1. \*\*Setting up CTEs for Home and Away Teams\*\*:  
 - The `home` CTE identifies matches where Manchester United was the home team, and determines if the match was a win, loss, or tie using a `CASE` statement.  
 - The `away` CTE performs the same function for matches where Manchester United was the away team.  
  
2. \*\*Joining CTEs\*\*:  
 - The `home` and `away` CTEs are joined back to the `match` table using the match `id` to provide a complete picture of each match.  
  
3. \*\*Querying the Results\*\*:  
 - The `SELECT DISTINCT` ensures unique combinations of match details, including the date, team names, and scores.  
 - A `WHERE` clause filters the results to include only matches from the 2014/2015 season where Manchester United was either the home or away team.