

## Add a Subquery to the SELECT Clause

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Daily XP 1467

Exercise

### Add a subquery to the SELECT clause

Subqueries in `SELECT` statements generate a single value that allow you to pass an aggregate value down a data frame. This is useful for performing calculations on data within your database.

In the following exercise, you will construct a query that calculates the average number of goals per match in each country's league.

Instructions

100 XP

- In the subquery, select the average total goals by adding `home_goal` and `away_goal`.
- Filter the results so that only the average of goals in the 2013/2014 season is calculated.
- In the main query, select the average total goals by adding `home_goal` and `away_goal`. This calculates the average goals for each league.
- Filter the results in the main query the same way you filtered the subquery. Group the query by the league name.

Take Hint (-30 XP)

query.sql

```
1 SELECT
2   l.name AS league,
3   -- Select and round the league's total goals
4   ROUND(____ + m.away_goal, 2) AS avg_goals,
5   -- Select & round the average total goals for the season
6   (SELECT ____ (____ + away_goal), 2)
7   FROM match
8   ____ = ____ AS overall_avg
9 FROM league AS l
10 LEFT JOIN match AS m
11 ON l.country_id = m.country_id
12 -- Filter for the 2013/2014 season
13 WHERE ____ = ____
14 GROUP BY ____;
```

Run Code

Submit Answer

query result

match league

No query executed yet...

Showing 0 out of 0 rows

### Question

In the subquery, select the average total goals by adding `home_goal` and `away_goal`.

Filter the results so that only the average of goals in the 2013/2014 season is calculated.

In the main query, select the average total goals by adding `home_goal` and `away_goal`. This calculates the average goals for each league.

Filter the results in the main query the same way you filtered the subquery.  
Group the query by the league name.

### Solution

```
SELECT
    l.name AS league,
    ROUND(AVG(m.home_goal + m.away_goal), 2) AS avg_goals,
    (
        SELECT ROUND(AVG(m.home_goal + m.away_goal), 2)
        FROM match AS m
        WHERE m.season = '2013/2014'
    ) AS overall_avg
FROM league AS l
LEFT JOIN match AS m
ON l.country_id = m.country_id
WHERE m.season = '2013/2014'
GROUP BY l.name;
```

### Explanation

This SQL query calculates the average number of goals per match for each league and compares it with the overall average for the 2013/2014 season. A subquery calculates the overall average. The main query joins the league and match tables, applies filters for the season, and groups the results by league name.