

LEFT JOIN with AVG Function by Region

This exercise uses a LEFT JOIN to determine the average GDP per capita by region for the year 2010. The AVG function is used in combination with GROUP BY to calculate the average GDP for each region.

Below is the instruction and query setup:

Learn / Courses / Joining Data In SQL

← Course Outline →

Daily XP 866

Exercise

Building on your LEFT JOIN

You'll now revisit the use of the `AVG()` function introduced in a previous course.

Being able to build more than one SQL function into your query will enable you to write compact, supercharged queries.

You will use `AVG()` in combination with a `LEFT JOIN` to determine the average gross domestic product (GDP) per capita by region in 2010.

Instructions 2/3 35 XP 2 3

- To calculate per capita GDP per region, begin by grouping by `region`.
- After your `GROUP BY`, choose `region` in your `SELECT` statement, followed by average GDP per capita using the `AVG()` function, with `AS avg_gdp` as your alias.

Take Hint (-10 XP)

query.sql

```
1 -- Select region, and average gdp_percapita as avg_gdp
2 ---
3 FROM countries AS c
4 LEFT JOIN economies AS e
5 USING(code)
6 WHERE year = 2010
7 -- Group by region
8 GROUP BY ---;
```

Run Code Submit Answer

query result

name	region	gdp_percapita
Afghanistan	Southern and Central Asia	539.667
Angola	Central Africa	3599.27
Albania	Southern Europe	4098.13
United Arab Emirates	Middle East	34628.63
Argentina	South America	10412.95
Armenia	Middle East	3121.78
Antigua and Barbuda	Caribbean	13531.78
Australia	Australia and New Zealand	56362.84
Austria	Western Europe	46757.43

Showing 100 out of 184 rows

-- SQL Query Using LEFT JOIN, AVG, and GROUP BY

```
SELECT region, AVG(gdp_percapita) AS avg_gdp
FROM countries AS c
LEFT JOIN economies AS e
```

```
USING(code)
WHERE year = 2010
-- Group by region
GROUP BY region;
```

Explanation: This query uses a LEFT JOIN to combine data from 'countries' and 'economies'. The USING clause simplifies the join condition by matching the 'code' column. The WHERE clause filters the data for the year 2010. The AVG function calculates the average GDP per capita for each region, and the GROUP BY clause ensures that the averages are grouped by region. The SELECT statement retrieves:

1. 'region': The region of the country.
2. 'AVG(gdp_percapita)': The average GDP per capita for each region, aliased as 'avg_gdp'.