SQL Exercise: Subquery Inside WHERE - Part 2

🏆 Daily XP 1865

Exercise

Subquery inside WHERE

The video pointed out that subqueries inside `WHERE` can either be from the same table or a different table. In this exercise, you will nest a subquery from the `populations` table inside another query from the same table, `populations`. Your goal is to figure out which countries had high average life expectancies in 2015.

You can use SQL to do calculations for you. Suppose you only want records from `2015` with `life_expectancy` *above* `1.15 * avg_life_expectancy`. You could use the following SQL query.

```
SELECT *
FROM populations
WHERE life_expectancy > 1.15 * avg_life_expectancy
  AND year = 2015;
```

In the first step, you'll write a query to calculate a value for `avg_life_expectancy`. In the second step, you will nest this calculation into another query.

⊘ **Instructions 2/2**   50 XP ✓ 2

- The answer from your query has now been nested into another query; use this calculation to filter `populations` for all records where `life_expectancy` is `1.15` times higher than average.

💡 Take Hint (-15 XP)

query.sql   ☀ Light Mode

```
1  SELECT *
2  FROM populations
3  WHERE year = 2015
4  -- Filter for only those populations where life expectancy is 1.15
   times higher than average
5    AND life_expectancy > ___
6    (SELECT AVG(life_expectancy)
7     FROM populations
8     WHERE year = 2015);
```

↺   Run Code   Submit Answer

query result   populations

avg

71.6763415481105

Showing 1 out of 1 rows

Question: The answer from your query has now been nested into another query; use this calculation to filter populations for all records where life expectancy is 1.15 times higher than average.

Correct Answer:
SQL Query:
SELECT *
FROM populations
WHERE year = 2015
AND life_expectancy > 1.15 * (

```
    SELECT AVG(life_expectancy)
    FROM populations
    WHERE year = 2015
);
```

Explanation:
- The query selects all columns from the 'populations' table for records from the year 2015.
- The 'life_expectancy' filter ensures only populations where life expectancy is 1.15 times higher than the calculated average are included.
- The subquery calculates the average life expectancy for the year 2015.
- The main query uses this subquery result dynamically to perform the filtering.