

Project T Final SQL Quiz

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1 Tables

Below are the two tables you will be referencing throughout this quiz.

This is the 'countries' table. As you can see it's schema is composed of a unique country_id, name, continent, and gdp.

country_id	name	continent	gdp
1	USA	North America	18000
2	France	Europe	2500
3	Brazil	South America	1800
4	Spain	Europe	1200
5	Chile	South America	247
6	Kenya	Africa	70
7	China	Asia	11000
8	India	Asia	2200
9	Israel	Asia	318
10	Australia	Australia	1200
11	Mexico	North America	1000
12	Canada	North America	1500

This is the 'cities' table. Its schema is composed of a unique city_id, name, and country_id which references the 'countries' table.

city_id	name	country_id
1	San Francisco	1
2	Chicago	1
3	New York	1
4	Boston	1
5	Paris	2
6	Bordeaux	2
7	Lyon	2
8	Rio de Janeiro	3
9	Sao Paulo	3
10	Madrid	4

Question 1: Write a query such that the result returns each continent and their average gdp. Ensure that there is only one row per continent.

Question 2: Construct a query that returns the country with the highest gdp without using the 'MAX' function.

Question 3: Construct a query such that it returns the names of the countries in descending order of their average gdp breaking ties with whose name comes first alphabetically.

Question 4: Construct a query such that you only keep the country names who have a gdp larger than the average gdp.

Question 5: Construct a query such that the result is a list of all the city names ending with an 'o'.

Question 6: Construct a query such that the result is all of the countries, their continents, and the cities in those countries.

Question 7: Will your above query return duplicate values? If so, which column will have duplicate values and why?

Question 8: Construct a query such that you return all of the city names, along with the city's corresponding country, continent and gdp.

Question 9: Construct a query such that you return all of the cities along with the average gdp of the continent that city is in.

Question 10: How many records will be returned by the following query?

```
SELECT *
FROM cities
LEFT JOIN countries
ON cities.country_id = countries.country_id;
```