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: What are the primary and foreign keys for each of the two tables?

Question 2: Using the countries table, which column would you group by if you wanted the average GDP for each continent?.

Question 3: What would the following query return?

SELECT MAX(name)
FROM countries;

Question 4: Write the ORDER BY clause that would fit the following description: GDP in descending order breaking ties with the Name in ascending order.

Question 5: Which clause would be used at the end of the query to get the top 5 countries with the highest GDP?

Question 6: Write the clause that would result in getting all of the cities whose names ended in an 'o'.

Question 7: Which columns from each table would you join on to write an inner equijoin between the cities and countries tables?

Question 8: Would the following query return duplicate values. If so, for which column and why?

SELECT *
FROM countries
INNER JOIN cities
ON countries.[join column from question 7] = cities.[join column from question 7];

Question 9: When do you use aliases in SQL queries?

Question 10: What does it mean when there is "column ambiguity" in your query?