Some Hints on Labsheet 7

December 1, 2023

1. Mumbai to Santiago de B.

2. Thirteen from China (35) to Iran (5). Join cities and countries; group by country code; use HAVING to enforce five-city criterion.

3. Many. Subquery to get I's independence year and outer query to get those gaining independence since.

4. Six languages (including Arabic, English and Spanish). Join countris and country_languages. Group by language; use HAVING to police six-country criterion.

5. Three countries. Two subqueries: one to get id of 20 with lowest GNP (using LIMIT to get lowest 20) and another to get those with lowest life expectancy. Use outer query to get names of contries with code in result of first subquery and with code in result of second subquery.

6. Nine countries (including Argentina, Australia and Canada). Inner query to get total area of particular continent using SUM. Outer query to find countries wiht area greater than 10% of the total for their continent. Correlated subquery to lin outer and inner query, so "particular continent" to interpreted to be that of the country currently under consideratoin in outer query.

7. About 0.83. Frame twp subqueries: one to to get sum gnp pf twenty richest (by GNP) and the other to get the total GNP across ass countries. Outer query to divide results: SELECT (Subquery1) / (Subquery2) ;

8. Former head of UK. Subquery to get max of all territories under single head of state. Use outer query to get name of head with thta area.

9. Seven rows (one per continent, including Russian Federation and Vatican for Europe). Frame subquery to create table with max and min population for each continent. Call this X. Three-way join countries-countries-X to create triples capturing pairs of countries linked to continent summaries. Impose conditions so three elements of each pair alighn on continent and ensure first country in pair has a populatiohn matching continent max and the other has a populatiohn matching continent min.

10. One row per country(including Netherland-Amsterdam, Albaina-Tirana etc). Outer query based on join between countries and cities; use correlated subqury to identify city with lagest population for country in question.

11. 181 countries. Use subquery to generate codes of countries in which percentage speaking any of the five specified languages is at least 20. Use an outer query and NOT IN to get those countries that are not the subquery list.

12. Seven languages (including Spanish, English and Arabic), Join countries and country_langauges; group by language; use HAVING clause to enforce two-continent requirement.