World Challenge SQL

1. Using COUNT , get the number of cities in the USA.

SELECT COUNT(CountryCode) FROM city WHERE CountryCode = 'USA';

2. Find out the population and life expectancy for people in Argentina.

SELECT Population, LifeExpectancy FROM country WHERE Name = 'Argentina';

3. Using IS NOT NULL , ORDER BY , and LIMIT , which country has the highest life expectancy?

SELECT LifeExpectancy FROM country

WHERE LifeExpectancy IS NOT NULL ORDER BY LifeExpectancy DESC LIMIT 1;

4. Using JOIN ... ON , find the capital city of Spain.

SELECT country.Name, city.Name FROM country

JOIN city ON country.Capital=city.id WHERE country.Name='Spain';

5. Using JOIN ... ON , list all the languages spoken in the Southeast Asia region.

SELECT countrylanguage.Language FROM countrylanguage

JOIN country ON country.Code=countrylanguage.CountryCode

WHERE country.Region='Southeast Asia';

6. Using a single query, list 25 cities around the world that start with the letter F.

SELECT Name FROM city WHERE Name LIKE 'F%'

LIMIT 25;

7. Using COUNT and JOIN ... ON , get the number of cities in China.

SELECT COUNT(CountryCode) FROM city

JOIN country ON country.Code=city.CountryCode

WHERE country.Name='China';

8. Using IS NOT NULL , ORDER BY , and LIMIT , which country has the lowest population? Discard non-zero populations.

SELECT Name, Population FROM country

WHERE Population IS NOT NULL

ORDER BY Population ASC LIMIT 1;

9. Using aggregate functions, return the number of countries the database contains.

SELECT COUNT(Name)

FROM country;

10. What are the top ten largest countries by area?

SELECT Name, SurfaceArea From country

ORDER BY SurfaceArea DESC LIMIT 10;

11. List the five largest cities by population in Japan.

SELECT city.Name FROM city

JOIN country ON city.CountryCode=country.Code

WHERE country.Name='Japan' ORDER BY city.Population DESC LIMIT 5;

12. List the names and country codes of every country with Elizabeth II as its Head of State. You will need to fix the mistake first!

UPDATE country

SET HeadOfState='Elizabeth II' WHERE HeadOfState='Elisabeth II';

SELECT Name, Code FROM country

WHERE HeadOfState='Elizabeth II';

13. List the top ten countries with the smallest population-to-area ratio. Discard any countries with a ratio of 0.

SELECT Name, SurfaceArea, Population, Population / SurfaceArea as ratio

FROM country WHERE (Population / SurfaceArea) > 0 ORDER BY ratio ASC, SurfaceArea DESC LIMIT 10;

14. List every unique world language.

SELECT DISTINCT Language FROM countrylanguage;

15. List the names and GNP of the world's top 10 richest countries.

SELECT Name, GNP FROM country

ORDER BY GNP DESC LIMIT 10;

16. List the names of, and number of languages spoken by, the top ten most multilingual countries.

SELECT country.Name, COUNT(countrylanguage.CountryCode) as Languages\_Spoken

FROM country JOIN countrylanguage ON countrylanguage.CountryCode=country.Code

GROUP BY country.Name ORDER BY COUNT(countrylanguage.CountryCode) DESC LIMIT 10;

17. List every country where over 50% of its population can speak German.

SELECT country.Name FROM country

JOIN countrylanguage ON countrylanguage.CountryCode=country.Code

WHERE countrylanguage.Language='German' AND countrylanguage.Percentage >= 50.00;

18. Which country has the worst life expectancy? Discard zero or null values.

SELECT Name, LifeExpectancy FROM country

WHERE LifeExpectancy IS NOT NULL

AND LifeExpectancy > 0 ORDER BY LifeExpectancy ASC LIMIT 1;

19. List the top three most common government forms.

SELECT GovernmentForm, COUNT(GovernmentForm)

FROM country GROUP BY GovernmentForm

ORDER BY COUNT(GovernmentForm) DESC LIMIT 3;

20. How many countries have gained independence since records began?

SELECT COUNT(IndepYear)

FROM country WHERE IndepYear IS NOT NULL;