**Tutorial 7 Assessment**

**Question 1**

Using the "World" database, find the country that has the highest LifeExpectancy. Write the SQL statement that prints the name of the country and the life expectancy. Which country and what is their life expectancy?

A screenshot of a computer

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SELECT Name, LifeExpectancy

FROM country

WHERE LifeExpectancy IS NOT NULL

ORDER BY LifeExpectancy DESC

LIMIT 1;

* The “SELECT Name, LifeExpectancy FROM country” statement selects the countries life expectancy from the Country table. The “WHERE LifeExpectancy IS NOT NULL” statement selects countries where the life expectancy isn’t 0. The statement “ORDER BY LifeExpectancy DESC” orders the life expectancy list in a descending order, and “LIMIT 1;” is limiting the selection to 1. Andorra is the country with the highest life expectancy at 83.5.

**Question 2**

You don't quite trust your skills and wish to test whether your statement for Question 1 was correct. Write the SQL statement that lists the top 10 countries by life expectancy. What is the rank of Australia in terms of life expectancy?

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SELECT Name, LifeExpectancy

FROM country

WHERE LifeExpectancy IS NOT NULL

ORDER BY LifeExpectancy DESC

LIMIT 10;

* The “SELECT Name, LifeExpectancy FROM country” statement selects the countries life expectancy from the Country table. The “WHERE LifeExpectancy IS NOT NULL” statement selects countries where the life expectancy isn’t 0. The statement “ORDER BY LifeExpectancy DESC” orders the life expectancy list in a descending order, and “LIMIT 10;” is limiting the selection to the top 10 countries with the highest life expectancy. Australia is ranked 6th in terms of life expectancy, with it being 79.8.

**Question 3**

Find the countries where the most languages are spoken. Write the SQL statement that prints the name of the country and the number of languages as 'Languages'. Only print the countries that have more than 6 languages and print them in descending order. What is the maximum number of languages spoken in any country? How many countries have this number of languages?

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SELECT c.Name AS CountryName, COUNT(cl.Language) AS Languages

FROM country c

JOIN countrylanguage cl

ON c.Code = cl.CountryCode

GROUP BY c.Name

HAVING Languages > 6

ORDER BY Languages DESC;

* The statement “SELECT c.Name AS CountryName,” selects the country name from the Country table, which have been simplified into c.Name, and the “COUNT(cl.Language) AS Languages” part uses COUNT() to aggregate and count the occurrences of languages, which has been shorted to cl. “AS Languages” means the output of the count will be shown with the name languages. The “FROM country c” specifies the table the data is coming from, and to refer to the table as c for shortened purposes. “JOIN countrylanguage cl” combines the CountryLanguage table and Country table together through the “ON c.Code = cl.CountryCode” statement that specifies the tables are related through the Code column in the Country table, and the CountryCode column in the CountryLanguage table. “GROUP BY c.Name” specifies to group the result together through the country names. The “HAVING Languages > 6” statement specifies that countries having more than 6 languages are selected, and “ORDER BY Languages DESC;” orders the list in descending order.