

## Module 2 Assignment Questions

Note that the answers to each of these questions should be the direct result of running appropriate commands and not involve any further processing, including manual work. Answers without the commands used to achieve them will not get any grade. Make sure you have MySQL installed on your system and have installed the required databases listed below.

Database required:

- The “world” database
1. Answer the following questions using the “world” database (See Canvas assignment prompt). Present your SQL queries and/or processes that you used to derive the answers.
    - 1.1 How many countries became independent in the twentieth century (1900 to 2000)? **(5 points)**
    - 1.2 How many people in the world are expected to live for 75 years or more? **(5 points)**
    - 1.3 List the 10 most populated countries in the world with their populations as a percentage of the world population. Use 6,840,507,000 for the world's population. [Hint: use the provided population for the world and then use it for percentage for countries, so something like: select Population/5000000000 from Country] **(10 points)**
    - 1.4 List the top 10 countries with the highest population density. [Hint: For population density, you can try something like: select Population/SurfaceArea from Country where....] **(10 points)**
    - 1.5 How many countries are there in each “Region” ? Write a SQL query that produces a list of regions with a column for country counts for each region and order the count descending. **(10 points)**
    - 1.6 What countries have more than 10 languages represented? Write a SQL query, using the "HAVING" clause, that produces the list of countries that have greater than 10 languages. Group by "CountryCode" and order by language count descending. **(10 points)**
    - 1.7 What are the names of the countries that have English as a language and gained their independence on or after the year 1990? **(10 points)**

**1.8** Write a query that returns the Country name, City name, and the number of non-English languages for all countries that meet each of the following criteria:

- Over 5 non-English languages
- Country population of less than or equal to 10 million
- Cities with a population greater than 1 million
- Sort in descending order for the number of non-English languages

**(20 points)**