

SQL LOGICAL QUESTIONS

Scenario: You are given a dataset containing information about global temperatures and CO2 emissions.

Table name: country_pollution

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Country	Temperature	CO2 Emissions	Date(Year)
.....

1. Question: Write a query to find the countries with the highest temperatures in the dataset?

Answer:

```
SELECT Country, Temperature
FROM country_pollution
ORDER BY Temperature DESC
LIMIT 1;
```

2. Question: Write a query to identify the countries with the lowest CO2 emissions in the dataset.

Answer:

```
SELECT Country, CO2_Emissions
FROM country_pollution
ORDER BY CO2_Emissions ASC
LIMIT 1;
```

3. Question: Write a query to find all temperature records above a specific value, for example, 20 degrees Celsius.

Answer:

```
SELECT Country, Temperature
FROM country_pollution
WHERE Temperature > 20;
```

4. Question: Write a query to list all countries with CO2 emissions data available for the year 2020.

Answer:

```
SELECT Country
FROM country_pollution
WHERE Date_Year = 2020;
```

5. Question: Write a query to count the total number of temperature records in the dataset.

Answer:

```
SELECT COUNT(*) AS TotalRecords
FROM country_pollution;
```

6. Question: Write a query to identify any countries with missing temperature data for a specific year, for example, 2015.

Answer:

```
SELECT Country
FROM country_pollution
WHERE Date_Year = 2015 AND Temperature IS NULL;
```

7. Question: Write a query to find the average temperature for each year in the dataset.

Answer:

```
SELECT Date_Year, AVG(Temperature) AS AvgTemperature  
FROM country_pollution  
GROUP BY Date_Year;
```

8. Question: Write a query to calculate the total CO2 emissions for all countries in the dataset.

Answer:

```
SELECT SUM(CO2_Emissions) AS TotalCO2Emissions  
FROM country_pollution;
```

9. Question: Write a query to sort the temperature data in descending order based on the temperature values.

Answer:

```
SELECT Country, Temperature  
FROM country_pollution  
ORDER BY Temperature DESC;
```