

SQL Logical Questions

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

Answer:

```
SELECT Country, MAX(Temperature) as Max_Temperature FROM country_pollution GROUP BY Country ORDER BY  
Max_Temperature DESC LIMIT 1;
```

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

Answer:

```
SELECT Country, MIN(CO2_Emissions) as Min_Emissions FROM country_pollution GROUP BY Country ORDER BY  
Min_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 * 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 DISTINCT Country FROM country_pollution WHERE Date = 2020 AND CO2_Emissions IS NOT NULL;
```

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

Answer:

```
SELECT COUNT(Temperature) as Total_Temperature_Records 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 = 2015 AND Temperature IS NULL;
```

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

Answer:

```
SELECT Date, AVG(Temperature) as Avg_Temperature FROM country_pollution GROUP BY Date;
```

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

Answer:

```
SELECT SUM(CO2_Emissions) as Total_CO2_Emissions FROM country_pollution;
```

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

Answer:

```
SELECT * FROM country_pollution ORDER BY Temperature DESC;
```