

SQL LOGICAL QUESTIONS

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

Table name: country_pollution

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

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

```
Select country, max (temperature) as highest_temperature
from country_pollution
group by country
order by highest_temperature desc
limit 1;
```

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

```
Select country, min (CO2_emissions) as lowest_CO2_emissions
from country_pollution
group by country
order by lowest_CO2_emissions asc
limit 1;
```

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

```
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.

```
Select 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.

```
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.

```
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.

```
Select date, avg(temperature) as average_temperature  
from country_pollution  
group by date;
```

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

```
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.

```
Select *  
from country_pollution  
order by temperature desc;
```

