Weather dataset analysis

https://www.kaggle.com/datasets/bhanupratapbiswas/weather-data

This data set contains total 8 columns.Here is a breakdown for each column

column	**description**
1.Date/time	Timestamp of weather record in (MM/DD/YYYY HH:MM format)
2.Temp_C	Temperature in Degree Celsius
3.Dewpoint Temp_C	Dew point temperature in degree celsius
4.Rel Humidity	Moisture in air in percentage
5.Wind speed in km/h	Windspeed
6.Visibility in kms	Visibility in kms
7.atmospheric pressure in kilo pascals	Pressure in kilopascals
8.weather	

Air contains water vapour

Dew Point:It is the measure of how much water vapour in the air(wetness in the air) in degree delsius

Dewpoint	Comfort level (how we feel like)
<10 c	cool air
21-24 c	dryness,uncomfortable
>24c	sweaty

1.Find the maximum temperature recorded

Select max(Temp_c) from weather;

Output:

https://drive.google.com/file/d/1Td_giS4WWC-Hp0BYw1ymjuN418zBiPBo/view?usp=sharing

2.Get distinct weather conitions

Select distinct Weather from weather;

Output:

https://drive.google.com/file/d/1KMrRSo5Tdht0-ABMD2L4DB3dbpJ6CIo2/view?usp=sharing

3.Write a query to find foggy hours

Select count(*) from weather where weather like'%fog%';

https://drive.google.com/file/d/1paFOzLlS61aVju2hWCbr6suOXWccP44P/view?usp=sharing

4.Write a query to find average temperature by weather condition

Select weather,avg(Temp_c) from weather group by weather;

https://drive.google.com/file/d/1qNE9hoOG6PbWVBPjVP79UiQRSWZaAp2N/view?usp=sharing

5.write a query to find number of hours with visibility below 1km

Select count(*) from weather where Visibility_km<1;

https://drive.google.com/file/d/10H7XN4pf__0pwsPPxZARzog-dSe2Ca-3/view?usp=sharing

6.Find the coldest hour(lowest temperature)

Select 'Date/Time',Temp_C from weather order by Temp_C ASC Limit 1;

https://drive.google.com/file/d/1GQtDyFSZlR16zSnZFFkLfN2HKgrAFheF/view?usp=sharing

7.Find the average pressure when temperature is below 0 c

Select avg(Press_Kpa) from weather where Temp_C<0;

https://drive.google.com/file/d/1rlzoVNq2JsOoO1OgND4MH7KRge3HvjVC/view?usp=sharing

8.count of weather conditions containing "Rain"

Select count(*) from weather where weather like '%Rain%';

https://drive.google.com/file/d/1_VWfkjBEBGF0fCoQT1Dmo-guJkjk7mwT/view?usp=sharing

9.Find Top 5 most frequent weather conditions

Select weather,count(*) as frequency from weather group by weather order by frequency desc limit 5;

https://drive.google.com/file/d/17adViRa_SMAg7ZnXWUfF9E27fXcZIfle/view?usp=sharing

10.Find average visibility during foggy weather

Select avg(Visibility_km) from weather where weather like '%fog';

https://drive.google.com/file/d/1l4nOJ1EIP3MaCkK5U2aiwZtNHkD5RIrT/view?usp=sharing

11.Find the maximum dew point recorded when it occurred

Select 'Date/Time','Dew Point Temp_C' from weather order by 'Dew point Temo_C' desc Limit 1;

https://drive.google.com/file/d/1sm6mggPttoHnX3-_rpTlq2u5z5t0A9iS/view?usp=sharing

12.Find the average wind speed for each weather condition

Select weather,avg('Wind Speed km/h') as avg_windspeed from weather group by weather;

https://drive.google.com/file/d/1owLZcE72dRbLetkRl930ZF5G2UY-3Kzc/view?usp=sharing