

GLOBAL WETHER ANALYSIS USING SQL (MYSQL)

create database Global_Wether;

use Global_Wether;

I HAVE EXPORTED DATA THROUGH CSV FILE & CREATED A TABLE AT THE TIME OF IMPORT.

select * from data;

country	location_name	latitude	longitude	timezone	last_updated_epoch	last_updated	temperature_celsius	temperature_fahrenheit	condition_text
Afghanistan	Kabul	34.52	69.18	Asia/Kabul	1693301400	2023-08-29 14:00	28.8	83.8	Sunny
Albania	Tirana	41.33	19.82	Europe/Tirane	1693301400	2023-08-29 11:30	27	80.6	Partly cloudy
Algeria	Algiers	36.76	3.05	Africa/Algiers	1693301400	2023-08-29 10:30	28	82.4	Partly cloudy
Andorra	Andorra La Vella	42.5	1.52	Europe/Andorra	1693301400	2023-08-29 11:30	10.2	50.4	Sunny
Angola	Luanda	-8.84	13.23	Africa/Luanda	1693301400	2023-08-29 10:30	25	77	Partly cloudy
Antigua and Barbuda	Saint John's	17.12	-61.85	America/Antigua	1693301400	2023-08-29 05:30	29	84.2	Light rain
Argentina	Buenos Aires	-34.59	-58.67	America/Argentina/Buenos_Aires	1693301400	2023-08-29 06:30	9	48.2	Clear
Armenia	Yerevan	40.18	44.51	Asia/Yerevan	1693301400	2023-08-29 13:30	31	87.8	Partly cloudy
Australia	Canberra	-35.28	149.22	Australia/Sydney	1693301400	2023-08-29 19:30	13	55.4	Clear
Austria	Vienna	48.2	16.37	Europe/Vienna	1693301400	2023-08-29 11:30	16	60.8	Light rain

***** KPI (Key Performance Indicator) Questions *****

1-FIND THE TOTAL DISTINCT COUNTRY AVAILABLE IN DATA.

select count(distinct(country))as 'Total Country' from data;

Total Country
185

2-SHOW THE AVG HUMIDITY FROM DATA.

select round(avg(humidity),2)as 'Avg Humidity' from data;

Avg Humidity
70.76

3-SHOW AVG UV INDEX FROM DATA.

select round(avg(uv_index),2)as 'Avg Uv Index' from data;

	Avg Uv Index
▶	2.48

4- WHAT IS THE AVG TEMP IN CELSIUS.

```
select round(avg(`feels_like_celsius`),2)as 'Avg Temp In ( c )' from data;
```

	Avg Temp In (c)
▶	19.87

-- 5-WHAT IS THE AVG TEMP IN FAHRENHEIT.

```
select round(avg(`feels_like_fahrenheit`),2)as 'Avg Temp In ( f )' from data;
```

	Avg Temp In (f)
▶	67.75

***** Exploratory Data Analysis Questions *****

1-SHOW THE TOP 3 COUNTRY WITH MAXIMUM AIR QUALITY BY GUST-MPH.

```
select country,round(max(`gust_mph`),2)as 'Count Of Gust In MPH' from data
```

```
group by country
```

```
order by `Count Of Gust In MPH` desc
```

```
limit 3;
```

	country	Count Of Gust In MPH
▶	Mozambique	96.40
	Iceland	68.70
	Vanuatu	64.70

2-SHOW THE BOTTOM 3 COUNTRY WITH MAXIMUM AIR QUALITY BY GUST-MPH.

```
select country,round(max(`gust_mph`),2)as 'Count Of Gust In MPH' from data
```

```
group by country
```

order by `Count Of Gust In MPH`

limit 3;

	country	Count Of Gust In MPH
▶	Bhutan	11.30
	Nepal	11.40
	Brazil	11.80

3-SHOW THE TOP 3 COUNTRY WITH MAXIMUM AIR QUYALITY BY OZONE.

select country,max(`air_quality_Ozone`)as 'Count Of Ozone' from data

group by country

order by `Count Of Ozone` desc

limit 3;

	country	Count Of Ozone
▶	Mexico	555
	United Arab Emirates	320.4
	Afghanistan	317.6

4-SHOW THE BOTTOM 3 COUNTRY WITH MAXIMUM AIR QUYALITY BY OZONE.

select country,round(max(`air_quality_Ozone`),2)as 'Count Of Ozone' from data

group by country

order by `Count Of Ozone` asc

limit 3;

	country	Count Of Ozone
▶	Central African Republic	31.80
	Malaysia	31.80
	Uganda	47.20

5- SHOW THE TOP 3 COUNTRY WITH MAXIMUM AIR QUALITY BY SULPHAR DIOXIDE.

```
select country,max(`air_quality_Sulphur_dioxide`)as 'Count Of Sulphar Dioxide' from data  
group by country  
order by `Count Of Sulphar Dioxide` desc  
limit 3;
```

	country	Count Of Sulphar Dioxide
▶	China	557
	Iran	511.2
	South Korea	469.2

6- SHOW THE BOTTOM 4 COUNTRY WITH MAXIMUM AIR QUALITY BY SULPHAR DIOXIDE.

```
select country,max(`air_quality_Sulphur_dioxide`)as 'Count Of Sulphar Dioxide' from data  
group by country  
order by `Count Of Sulphar Dioxide`  
limit 4;
```

	country	Count Of Sulphar Dioxide
▶	China	557
	Iran	511.2
	South Korea	469.2
	North Korea	335.7

7- SHOW THE TOP 3 COUNTRY WITH MAXIMUM AIR QUALITY BY CARBON MONOOXIDE.

```
select country,round(max(`air_quality_Carbon_Monoxide`))as 'Count Of Carbon Monooxide'  
from data  
group by country  
order by `Count Of Carbon Monooxide` desc
```

limit 3;

	country	Count Of Carbon Monooxide
▶	Indonesia	41870
	Thailand	20081
	Malaysia	18372

8- SHOW THE BOTTOM 3 COUNTRY WITH MAXIMUM AIR QUALITY BY CARBON MONOOXIDE.

select country,round(max(`air_quality_Carbon_Monoxide`),1)as 'Count Of Carbon Monooxide' from data

group by country

order by `Count Of Carbon Monooxide`

limit 3;

	country	Count Of Carbon Monooxide
▶	Marshall Islands	233.7
	Andorra	237.0
	Fiji Islands	243.7

9-SHOW THE TOP 3 COUNTRY WITH MAXIMUM AIR QUALITY BY NITROGEN DIOXIDE.

select country,round(max(`air_quality_Nitrogen_dioxide`),0)as 'Count Of Nitrogen Dioxide' from data

group by country

order by `Count Of Nitrogen Dioxide` desc

limit 3;

	country	Count Of Nitrogen Dioxide
▶	Iran	576
	Malaysia	494
	South Korea	384

10-SHOW THE BOTTOM 4 COUNTRY WITH MAXIMUM AIR QUALITY BY NITROGEN DIOXIDE.

```
select country,round(max(`air_quality_Nitrogen_dioxide`),2)as 'Count Of Nitrogen Dioxide'  
from data
```

```
group by country
```

```
order by `Count Of Nitrogen Dioxide`
```

```
limit 4;
```

	country	Count Of Nitrogen Dioxide
▶	Marshall Islands	0.00
	Tuvalu	0.00
	Kiribati	0.10
	Micronesia	0.10

11-SHOW THE TOP 3 COUNTRY WITH MAXIMUM AIR QUALITY BY PM10.

```
select country,round(max(`air_quality_PM10`),2)as 'Count Of PM10' from data
```

```
group by country
```

```
order by `Count Of PM10` desc
```

```
limit 3;
```

	country	Count Of PM10
▶	Mauritania	3566.40
	Chad	2504.30
	Indonesia	1859.60

12-SHOW THE BOTTOM 3 COUNTRY WITH MAXIMUM AIR QUALITY BY PM10.

```
select country,round(max(`air_quality_PM10`),2)as 'Count Of PM10' from data
```

```
group by country
```

```
order by `Count Of PM10` ASC
```

```
limit 3;
```

	country	Count Of PM10
▶	Solomon Islands	9.60
	Iceland	12.30
	Tanzania	12.50

13-SHOW THE TOP 3 COUNTRY WITH MAXIMUM AIR QUALITY BY PM2.5.

select country,round(max(`air_quality_PM2.5`),2)as 'Count Of PM2.5' from data

group by country

order by `Count Of PM2.5` desc

limit 3;

	country	Count Of PM2.5
▶	Indonesia	1558.80
	India	1329.20
	China	1133.00

14-SHOW THE BOTTOM 3 COUNTRY WITH MAXIMUM AIR QUALITY BY PM2.5.

select country,round(max(`air_quality_PM2.5`),2)as 'Count Of PM2.5' from data

group by country

order by `Count Of PM2.5` ASC

limit 3;

	country	Count Of PM2.5
▶	Tuvalu	4.60
	Iceland	4.80
	Kiribati	5.70