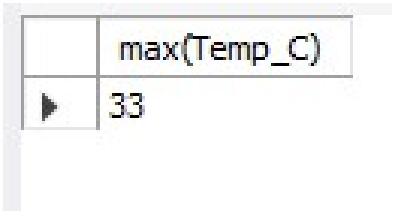
Weather Dataset Analysis

1.Find maximum temperature recorded

```
select max(Temp_C) from weather;
```



	max(Temp_C)
▶	33

2. Get distinct weather conditions

```
select distinct weather from weather;
```

	weather
▶	Fog
	Freezing Drizzle,Fog
	Mostly Cloudy
	Cloudy
	Rain
	Rain Showers
	Mainly Clear
	Snow Showers
	Snow
	Clear
	Freezing Rain,Fog

3. Write a query to find foggy hours

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

	count(*)
▶	426

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

```
select weather,avg(Temp_C) from weather
group by weather;
```

	weather	avg(Temp_C)
▶	Fog	4.303333333333334
	Freezing Drizzle,Fog	-2.5333333333333337
	Mostly Cloudy	10.574287095215071
	Cloudy	7.970543981481501
	Rain	9.78627450980392
	Rain Showers	13.722340425531916
	Mainly Clear	12.558926875593524
	Snow Showers	-3.5066666666666677
	Snow	-4.524102564102566
	Clear	6.825716440422332
	Freezing Rain,Fog	-2.2249999999999996

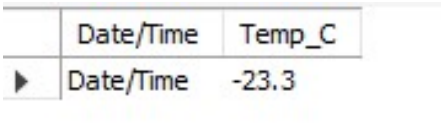
5. Write a query to find number of hours with visibility below 1 km

```
select count(*) from weather
where Visibility_Km<1;
```

	count(*)
▶	34

6. Find the coldest hour(lowest temperature)

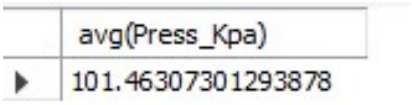
```
select 'Date/Time',Temp_C from weather
order by Temp_C  ASC limit 1;
```



	Date/Time	Temp_C
▶	Date/Time	-23.3

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

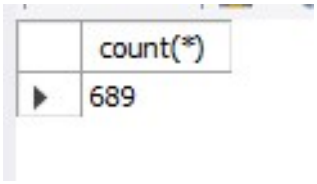
```
select avg(Press_Kpa) from weather
where Temp_C<0;
```



	avg(Press_Kpa)
▶	101.46307301293878

8. Count of weather conditions containing “Rain”

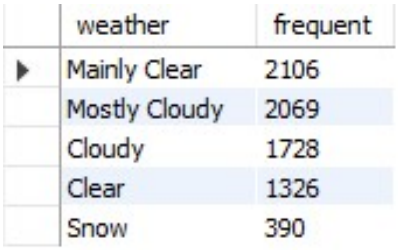
```
select count(*) from weather
where weather like '%Rain%';
```



	count(*)
▶	689

9. Find Top 5 most frequent weather conditions

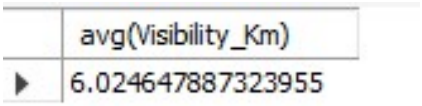
```
select weather,count(*) as frequent
from weather group by weather
order by frequent desc limit 5;
```



weather	frequent
Mainly Clear	2106
Mostly Cloudy	2069
Cloudy	1728
Clear	1326
Snow	390

10. Find average visibility during foggy weather

```
select avg(Visibility_Km) from weather
where weather like '%fog%';
```



avg(Visibility_Km)
6.024647887323955