Lab3. India Weather Analytics using Historical Data Part-II

Objectives:
In this lab, you are going to explore further India Weather Dataset with additional query operators such as GROUPBY, HAVING and ORDERBY

Tasks To Be Completed:

Question1: Write 3 Queries using WHERE and GROUPBY clause
Question2: Write 3 Queries using WHERE, GROUPBY and HAVING clause
Question3: Write 3 Queries using WHERE, GROUPBY, HAVING and ORDERBY clause

Sample Queries

1. What is the average weather in May of all cities?. Display city and average temperature in descending order.

```
SQL> Select city, avg(temperature) from weather_india where
month=5 group by city order by city desc;
```

2. Show the average historic temperature (from year 1995 to Feb 2020, entire table) in each city in ascending order of city name.

```
SQL> Select city, avg(temperature) from weather_india
where year between 1995 and 2020 and month=2
2 group by city order by city;
```

3. Show lowest, highest and average temperature in Kolkata during 2010 to 2020.

```
SQL> Select min(temperature), max(temperature), avg(temperature)
from weather_india where year between 2010 and 2020
2 and city = 'KolKata';
```

4. Find cities and average temperature which recorded atleast 40 degree Celsius in April 2019.

```
SQL> Select city, avg(temperature) from weather_india where
temperature <= 40 and year = 2019 and month = 4 group
by city;
```

5. Show monthwise average temperature in Chennai in 2019. Print month name and average temperature values

```
SQL> Select mon, month, avg(temperature) from india_weather
data where year = 2019 and city = 'chennai' group by
mon, month order by month asc;
```

6. Show year wise average temperature of Mumbai. Print year and corresponding average temperature values, in descending order

```
SQL> Select year, avg(temperature) from weather_india where
city = 'mumbai' group by year order by year desc;
```

7. Show city wise yearly average temperature values for the years 2017, 2018 and 2019. City names as rows and years as columns. Each cell will denote its average temperature value.

```
SQL> Select city, year, avg(temperature) from weather_india
where year between 2017 and 2019 group by city,
year order by city, year asc;
```