225229142 **LAB-3**

SWETHA JENIFER S **WEATHER INDIA**

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

SQL> select city, avg(temp) from india where month=5 group by city order by avg(temp) desc;

CITY	AVG(TEMP)
delhi	89.6534194
chennai	88.636
kolkata	85.888
mumbai	85.2651613

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(temp) from india group by city order by city asc;

CITY	AVG(TEMP)
chennai	82.8219791
delhi	75.7865012
kolkata	78.8528086
mumbai	81.5042238

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

SQL> select min(temp),max(temp),avg(temp) from india where city='kolkata' and year>=2010;

MIN(TEMP)	MAX(TEMP)	AVG(TEMP)
-99	96.3	79.0960345

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

SQL> select city,avg(temp) from india where temp>=40 and year=2019 and month=4 group by city;

CITY AVG(TEMP)

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chennai 89.1724138

mumbai 85.6896552

delhi 86.9307692

kolkata 85.1448276

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

SQL> select month,avg(temp) from india where city='chennai' and year=2019 group by month order by avg(temp);

MONTH AVG(TEMP)

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5 73.6064516

1 77.3451613

12 79.6225806

2 82.2678571

11 82.52

4 82.9

10 83.2806452

9 85.2066667

3 85.9064516

8 88.3709677

7 88.8967742

MONTH AVG(TEMP)

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6 92.5466667

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

SQL> select year,avg(temp) from india where city='mumbai' group by year order by year desc;

YEAR AVG(TEMP)

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2020 78.962963

2019 79.8649315

2018 82.2526027

2017 83.4043836

2016 81.8393443

2015 82.6166667

2014 82.2515068

2013 81.7391781

2012 81.6964481

2011 82.2846575

2010 82.6871233

YEAR AVG(TEMP)

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2009 82.5021918

2008 80.492623

2007 81.4682192

2006 81.3005479

2005 81.2624658

2004 80.6027322

2003 81.4369863

2002 80.1052055

2001 81.0630137

2000 81.7103825

1999 81.2789041

YEAR AVG(TEMP)

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1998 80.0279452

1997 81.7857534

1996 81.745082

1995 80.5621918

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(temp) from india where year in(2017,2018,2019) group by year,city order by city,year;

CITY YEAR AVG(TEMP)

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chennai 2017 84.7586301

chennai 2018 83.8887671

chennai 2019 83.5249315

delhi 2017 77.9082192

delhi 2018 75.099726

delhi 2019 73.4953425

kolkata 2017 79.8583562

kolkata 2018 78.1339726

kolkata 2019 76.2112329

mumbai 2017 83.4043836

mumbai 2018 82.2526027

CITY YEAR AVG(TEMP)

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mumbai 2019 79.8649315