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SQL ASSESSMENT: 3

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 w_india where month=5 group by city order by avg(temp) desc;

Output:

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 w_india group by city order by city;

Output:

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 w_india where city='kolkata' and year between 2010 and 2020;

Output:

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 w_india where temp>=40 and year=2019 group by city;

Output:

CITY	AVG(TEMP)
chennai	85.5473684
mumbai	82.8543175
delhi	77.8561798
kolkata	79.1395543

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

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

Output:

MONTH	AVG(TEMP)
1	77.3451613
2	82.2678571
3	85.9064516
4	82.9
5	73.6064516
6	92.5466667
7	88.8967742
8	88.3709677
9	85.2066667
10	83.2806452
11	82.52
12	79.6225806

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

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

Output:

YEAR	AVG(TEMP)

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)
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)
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 w_india where year in(2017,2018,2019) group by year,city order by city,year;

Output:

CITY	YEAR	AVG(TEMP)
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**
mumbai	**2019**	**79.8649315**