

## Lab-5

### Assignment 2: Sales Database.

Schema: **Sales\_Data( Region\_cd, City, Salesperson, Sales, Gender)**

Region_cd	city	salesperson	sales	gender
N	Lucknow	Trivedi,virendra	460	M
N	Lucknow	Singhal,aruna	550	F
N	Lucknow	Khan,arif	625	M
N	Lucknow	Joshi,varun	600	M
N	Lucknow	Robinson,danny	490	M
N	Lucknow	Singh,Reena	620	F
N	Kanpur	Singh,Rahul	650	M
N	Kanpur	Yadav, anil kumar	610	M
N	Kanpur	Kumar,akhilesh	480	M
N	Kanpur	Verma,neerja	550	F
N	Kanpur	Mandal,kaveri	590	F
W	Ahmedabad	Shah,Deepak	500	M
W	Ahmedabad	Shah, vasudha	605	F
W	Ahmedabad	Vora,minoo	535	M
W	Ahmedabad	Sharma,anil	550	M
W	Ahmedabad	Vasthsala,m	555	F
W	Ahmedabad	Kumar,sarvesh	550	M
W	Bombay	Shroff,cyrus	700	M
W	Bombay	Das,Deepak	550	M
W	Bombay	Marathe,mukund	620	M
W	Bombay	Kulkarni,shobha	680	F
W	Bombay	Dewan,madhubala	580	F
W	Bombay	Bhatia,arjun	660	M
W	Bombay	Joshi,mohan	590	M
E	calcutta	Thakur,kanchan	560	F
E	Calcutta	Rohatgi,anita	650	F
E	Calcutta	Banerji,prodipto	640	M
E	Calcutta	Tomar,veena	520	F
E	Calcutta	Chatterji,suresh	640	M
E	Calcutta	Verma,rachit	630	M

### Questions:

- 1) Retrieve all the columns from sales\_data table.
- 2) Retrieve city, sales and salesperson name whose sales are greater than or equal to 600.

- 3) Retrieve city, gender and average sales of salesperson from Sales\_Data.
- 4) Retrieve city, gender and average sales where Region\_cd is 'N'.
- 5) Retrieve Region\_cd and city where average sales are greater than 550.
- 6) Retrieve city, salesperson where sales is greater than or equal to 600 and order by city and salesperson.
- 7) Retrieve city and salesperson where sales are greater than or equal to 600 and order by descending city and ascending order of salesperson.
- 8) Retrieve city, salesperson where city='LUCKNOW'
- 9) Retrieve city, salesperson, sales where sales is greater than or equal to 600.
- 10) Retrieve city, salesperson, sales where city is "LUCKNOW" and sales is greater than or equal to 600.
- 11) Retrieve city, salesperson, sales where city is "LUCKNOW" or sales is greater than or equal to 600.
- 12) Retrieve city, salesperson, sales where city is neither "LUCKNOW" nor the sales is greater than or equal to 600.
- 13) Retrieve city where Region\_cd='N'.
- 14) Retrieve distinct city where Region\_cd='N'.
- 15) Count the number of tuples in the given table.
- 16) Retrieve the average sales and also increment by 20% where city is 'LUCKNOW'
- 17) Count the number of tuples in the given table where city='BOMBAY'.
- 18) Retrieve salesperson, where salesperson between 'A' and 'N' order by salesperson.
- 19) Retrieve city, salesperson where sales not between 500 and 600.
- 20) Retrieve city, salesperson, sales where city in 'LUCKNOW' and 'KANPUR'.
- 21) Retrieve city, salesperson, sales where city not in 'LUCKNOW' and 'KANPUR'
- 22) Retrieve salesperson where salesperson like 'Anil'.
- 23) Retrieve salesperson where the salesperson name ends with 'ah'.
- 24) Retrieve city, salesperson where city in 'luck now' and 'Kanpur' and sales greater than or equal to 600.
- 25) Write a query to extract the average sales across all salespersons.
- 26) Write a query to extract all Calcutta based salesperson whose names start with 't'.
- 27) Write a query to extract maximum sales in each city with the names of the sales\_person.
- 28) Indicate whether the following are true or false?
  - a) The predicate sales between 1000 and 0 will select all salesperson.
  - b) The result of a query is always a table.
  - c) The predicate salesperson like 'jo%' will select two salesperson.
  - d) The predicate salesperson like '%singh%' will select three salesperson.
  - e) The result table's rows are in the order of the inserts done if no order by clause is given.
  - f) The predicate city=Bombay will select seven rows.
- 29) What will the following queries give?
  - a) Select salesperson from sales\_data where 1=0;
  - b) Select salesperson from sales\_data where 1=1;
  - c) Select 'col1' from sales\_data;

d) Select 'col1', count(8) from sales\_data.

### Queries on Update Command

Create a new table New\_Sales\_Data

Schema: New\_Sales\_Data ( region\_id, city, salesperson,sales, gender)

Region Id	City	Salesperson	Sales	Gender
S	Madhurai	Swaminathan, R	500	M
S	Kochi	Mala, T	600	F
N	Bhopal	Joshi, Harideo	250	M
S	Bangalore	Kumar, Mohan	0	

- 1) What is the output of the following query?  
Insert into new\_sales\_data  
Select \* from sales\_data where city='lucknow'.
- 2) Update the value in new\_sales\_data where region is set to 'c' and city is Bhopal.
- 3) Update the value in new\_sales\_data where set sales to be incremented by 20% where city is 'kochi'.
- 4) Delete from new\_sales\_data where city=baroda.

### Queries on group by and having

- 1) Retrieve total sales and city from sales data table.
- 2) Retrieve total sales and city where city is KANPUR from sales data table
- 3) Retrieve the average sales, city, gender from sales data.
- 4) Retrieve the city from sale data where count> 5.
- 5) Select salesperson from sales data and order by salesperson.
- 6) Retrieve the average sales and city order by city (descending).
- 7) Retrieve the minimum and maximum sales from sales data.
- 8) Retrieve the eastern region and northern region where region\_cd is 'N' and 'E' respectively and order by the result.

### Quereies on Aggregate functions

- 1) Select the max sales.
- 2) Select the max sales where the city is 'Lucknow'.

- 3) Select city and max sales.
- 4) Select city, max sales and group by city.
- 5) Select the average sales and max sales.
- 6) Select max of the total sales from city\_sales.
- 7) Select cities where average sales is >550.
- 8) Select city, average sales group by city.
- 9) Select max and min sales and salesperson.
- 10) Count distinct city .

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