PRACTICAL 1

Aim: Create Table and Perform insert, update and delete query.

Query & Results:

Create Table

Table 1 : - Salespeople

Table	Column	Data Type	Length	Primary Key	Nullable	Default
SALESPEOPLE	SNUM	int	11	1	-	-
	SNAME	Varchar	255	-		-
	CITY	Varchar	255	-	✓	Surat
	COMM	Decimal	5,2	-	✓	-

Inserting Values in Table

SNUM	SNAME	CITY	COMM
1001	Peel	London	.12
1004	Motika	London	.11

1007	Rifkin	Barcelona	.15
1002	Serres	San Jose	.13
1003	Axelord	New York	.1

Table 2 :- Customer

Table	Column	Data Type	Length	Primary Key	Nullable	Default
CUSTOMER	CNUM	Int	11	1	-	-
	CNAME	Varchar	255	-	✓	-
	CITY	Varchar	255	-	✓	-
	RATING	int	11	-	✓	-
	SNUM	int	11	-	✓	-

CNUM	CNAME	CITY	RATING	SNUM
2002	Giovanne	Rome	200	1003
2003	Liu	San Jose	300	1002

2004	Grass	Berlin	100	1002
2006	Clemens	London	300	1007
2001	Hoffman	London	100	1001
2007	Pereira	Rome	100	1004

Table 3 :- Orders

Table	Column	Data Type	Length	Primary Key	Nullable	Default
ORDERS	ONUM	int	11	1	-	-
	AMT	Decimal	5,2	-	✓	-
	ODATE	Varchar	7	-	✓	-
	CNUM	int	11	-	✓	-
	SNUM	int	11	-	✓	-

ONUM	AMT	ODATE	CNUM	SNUM
3001	1800.96	10-MAR-94	2002	1002
3002	1900.1	10-MAR-94	2007	1003
3009	1713.23	10-APR-94	2002	1003
3003	767.19	10-MAR-94	2001	1001
3005	5160.45	10-MAR-94	2003	1002
3007	75.75	10-APR-94	2004	1002
3008	4723.95	10-MAY-94	2006	1001
3010	1309.95	10-JUN-94	2004	1002
3011	9891	10-JUN-94	2006	1001
3012	767.19	10-MAR-94	2001	1001

- **Updating Tuple**

ONUM	AMT	ODATE	CNUM	SNUM
3001	**18.96**	**10-MAR-94**	**2002**	**1002**
3002	1900.1	10-MAR-94	2007	1003
3009	1713.23	10-APR-94	2002	1003
3003	767.19	10-MAR-94	2001	1001
3005	5160.45	10-MAR-94	2003	1002
3007	75.75	10-APR-94	2004	1002
3008	4723.95	10-MAY-94	2006	1001

3010	1309.95	10-JUN-94	2004	1002
3011	9891	10-JUN-94	2006	1001
3012	767.19	10-MAR-94	2001	1001

- **Deleting Tuple**

  onum=3012;

ONUM	AMT	ODATE	CNUM	SNUM
3001	18.96	10-MAR-94	2002	1002
3002	1900.1	10-MAR-94	2007	1003
3009	1713.23	10-APR-94	2002	1003
3003	767.19	10-MAR-94	2001	1001
3005	5160.45	10-MAR-94	2003	1002
3007	75.75	10-APR-94	2004	1002
3008	4723.95	10-MAY-94	2006	1001
3010	1309.95	10-JUN-94	2004	1002
3011	9891	10-JUN-94	2006	1001

PRACTICAL 2

Aim: Perform Different types of SQL function. ex sum, avg, etc

Query & Results:

1) Display snum, sname, city and comm. Of all salespeople.

SNUM	SNAME	CITY	COMM
1001	Peel	London	.12
1004	Motika	London	.11
1007	Rifkin	Barcelona	.15
1002	Serres	San Jose	.13
1003	Axelord	New York	.1

2)Display all snum without duplicates from all orders.

SNUM
1003
1002
1001

3)Display names and commissions of all salespeople from London.

SNAME	COMM
Peel	.12
Motika	.11

4)All customers with a rating of 100.

CNAME
Grass
Hoffman
Pereira

5)Produce order no, amount and date for all rows in the order table

ONUM	AMT	ODATE
3001	18.96	10-MAR-94
3002	1900.1	10-MAR-94
3009	1713.23	10-APR-94
3003	767.19	10-MAR-94
3005	5160.45	10-MAR-94
3007	75.75	10-APR-94
3008	4723.95	10-MAY-94
3010	1309.95	10-JUN-94
3011	9891	10-JUN-94

6)All customers who were either located in San Jose or had a rating above $200.

- select *from customer where city='San Jose' or rating>200

CNUM	CNAME	CITY	RATING	SNUM
2003	Liu	San Jose	300	1002
2006	Clemens	London	300	1007

7)All customers in San Jose, who have a rating > 200

CNUM	CNAME	CITY	RATING	SNUM
2003	Liu	San Jose	300	1002

8)All orders for more than $1000.

ONUM	AMT	ODATE	CNUM	SNUM
3002	1900.1	10-MAR-94	2007	1003
3009	1713.23	10-APR-94	2002	1003
3005	5160.45	10-MAR-94	2003	1002
3008	4723.95	10-MAY-94	2006	1001
3010	1309.95	10-JUN-94	2004	1002
3011	9891	10-JUN-94	2006	1001

9)Names and cities of all salespeople in London with a commission above 0.10.

SNAME	CITY
Peel	London
Motika	London

10)All customers excluding those with rating <= 100 if they are located in Rome.

CNUM	CNAME	CITY	RATING	SNUM
2002	Giovanne	Rome	200	1003

11)All salespeople either in Barcelona or in London.

SNUM	SNAME	CITY	COMM
1001	Peel	London	.12
1004	Motika	London	.11
1007	Rifkin	Barcelona	.15

12)All salespeople with commission between 0.10 and 0.12 boundary. (Boundary values 0.10 and 0.12 to be included.)

SNUM	SNAME	CITY	COMM
1001	Peel	London	.12
1004	Motika	London	.11
1003	Axelord	New York	.1

13)All customers without a city.

14)All orders taken on Mar. 10^{th} or 10^{th} Apr.

ONUM	AMT	ODATE	CNUM	SNUM
3001	18.96	10-MAR-94	2002	1002
3002	1900.1	10-MAR-94	2007	1003

3009	1713.23	10-APR-94	2002	1003
3003	767.19	10-MAR-94	2001	1001
3005	5160.45	10-MAR-94	2003	1002
3007	75.75	10-APR-94	2004	1002

15) All customers services by Peel or Motika.

CNUM	CNAME	CITY	RATING	SNUM
2001	Hoffman	London	100	1001
2007	Pereira	Rome	100	1004

16) All customers whose names begin with a letter A or G.

CNUM	CNAME	CITY	RATING	SNUM
2002	Giovanne	Rome	200	1003
2004	Grass	Berlin	100	1002

17) All orders except those with 0 or null value in amt field.

ONUM	AMT	ODATE	CNUM	SNUM
3001	18.96	10/03/1994	2002	1002
3003	767.19	10/03/1994	2001	1001
3002	1900.1	10/03/1994	2007	1003
3005	5160.45	10/03/1994	2003	1002
3009	1713.23	10/04/1994	2002	1003
3007	75.75	10/04/1994	2004	1002
3008	4723.95	10/05/1994	2006	1001
3010	1309.95	10/06/1994	2004	1002
3011	9891	10/06/1994	2006	1001

18)Count the number of salespeople currently listing orders in the order table

COUNT(DISTINCTSNUM)
3

19)Largest order taken by each sales order value more than $3000.

MAX(AMT)
9891

20)Which day had the highest total amount ordered?

ODATE	AMT_ORDERED
10/06/1994	11200.95

21) Count all orders for 10 June.

Get the output like:

For dd/mm/yy, there are_____orders

ODATE	NUMBER_OF_ORDERS
10/06/1994	2

22) Count the number of different non-null city values in customers table.

NUMBER_OF_CITIES
4

23) Assume that each salesperson has a commission of 12%. Produce order no, salesman no and amount salesman commission for each day and place the result in descending order.

ONUM	SNUM	COMM_AMT
3011	1001	1186.92
3005	1002	619.254
3008	1001	566.874
3002	1003	228.012
3009	1003	205.5876
3010	1002	157.194
3003	1001	92.0628
3007	1002	9.09
3001	1002	2.2752

24) Find salespeople no, who have multiple customers.

SNUM
1002

25) Extract rows of all salespeople with more than one current order.

SNUM	COUNT(SNUM)
1003	2
1002	4
1001	3

PRACTICAL 3

Aim: Perform Different Joins

1. Inner Join
2. Outer join
   - Left Outer join
   - Right Outer join
   - Full Outer join

Query & Results:

1. Inner Join

1) All combination of salespeople and customers who belong to the same city.

SNAME	CNAME	CITY
Motika	Hoffman	London
Peel	Hoffman	London
Serres	Liu	San Jose
Motika	Clemens	London
Peel	Clemens	London

2) Names of all customers matched with the salespeople serving them.

CNAME	SNAME
Hoffman	Peel
Liu	Serres
Grass	Serres
Giovanne	Axelord
Pereira	Motika
Clemens	Rifkin

3) List each order with the name of the customer who placed the order.

CNAME	AMT	ONUM
Giovanne	18.96	3001
Hoffman	767.19	3003
Pereira	1900.1	3002
Liu	5160.45	3005
Giovanne	1713.23	3009
Grass	75.75	3007
Clemens	4723.95	3008
Grass	1309.95	3010
Clemens	9891	3011

4) Produce a listing of all the customers serviced by salespeople having commission more than 12%.

CNAME	SNAME	COMM
Liu	Serres	.13
Grass	Serres	.13
Clemens	Rifkin	.15

5) Calculate the amount of salesperson's commission on each order with a rating above 100.

SNUM	ONUM	COMM	COMM_AMT
1002	3001	.13	.024648
1003	3002	.1	1.9001
1003	3009	.1	1.71323
1002	3005	.13	6.708585
1002	3007	.13	.098475
1002	3010	.13	1.702935

6) Display all customers located in cities where salesman serves has his customers.

SNUM	CNUM	CNAME	CITY	CITY
1002	2003	Liu	San Jose	San Jose
1001	2001	Hoffman	London	London

7) Produce all pairs of orders by a given customer, name that customer and eliminate duplicates.

CNUM	ONUM	CNAME
2002	3001	Giovanne
2007	3002	Pereira
2002	3009	Giovanne
2001	3003	Hoffman
2003	3005	Liu
2004	3007	Grass
2006	3008	Clemens
2004	3010	Grass
2006	3011	Clemens

8) Find all customers with orders on Mar 10th

CNAME
Giovanne
Pereira
Hoffman
Liu

9) Find all salespeople who have customers in their cities who they don't service.

CNAME
Hoffman

Clemens