Database: Sales

Create database Sales;

Use sales

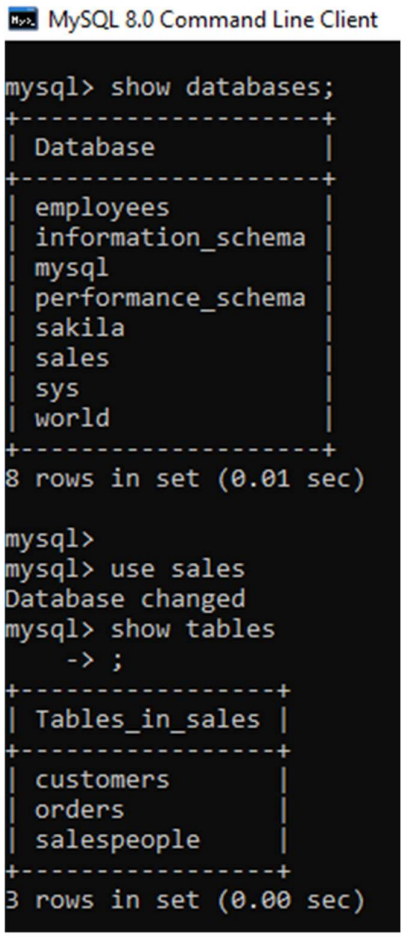

Table 1: SalesPeople

Snum is Primary key

Sname is Unique constraint

Create table salespeople (Snum int NOT NULL, Sname varchar(15) NOT NULL, City varchar(15),Comm int, UNIQUE (Sname), PRIMARY KEY (Snum));

Snum	Sname	City	Comm
1001	Peel	London	12
1002	Serres	Sanjose	13
1004	Motika	London	11
1007	Rifkin	Barcelona	15
1003	Axelrod	Newyork	10

Insert into salespeople Values(1001,Peel,London,.12);

```
mysql> select * from salespeople;
+------+---------+-----------+------+
| Snum | Sname   | City      | Comm |
+------+---------+-----------+------+
| 1001 | Peel    | London    |   12 |
| 1002 | Serres  | Sanjose   |   13 |
| 1003 | Axelrod | Newyork   |   10 |
| 1004 | Motika  | London    |   11 |
| 1007 | Rifkin  | Barcelona |   15 |
+------+---------+-----------+------+
5 rows in set (0.00 sec)
```

Table 2: Customers

Cnum is Primary Key

City has not null constraint .

Snum is foreign key constraint refers Snum column of SalesPeople table.

CREATE TABLE Customers(Cnum int, Cname varchar(15), City varchar(15) NOT NULL,Snum int, PRIMARY KEY (Cnum),FOREIGN KEY (Snum) REFERENCES Salespeople(Snum));

Cnum	Cname	City	Snum
2001	Hoffman	London	1001

2002	Giovanni	Rome	1003
2003	Liu	Sanjose	1002
2004	Grass	Berlin	1002
2006	Clemens	London	1001
2008	Cisneros	Sanjose	1007
2007	Pereira	Rome	1004

```
mysql> select * from customers;
+------+----------+--------+------+
| Cnum | Cname    | City   | Snum |
+------+----------+--------+------+
| 2001 | Hoffman  | London | 1001 |
| 2002 | Giovanni | Rome   | 1003 |
| 2003 | Liu      | Sanjose| 1002 |
| 2004 | Grass    | Berlin | 1002 |
| 2006 | Clemens  | London | 1001 |
| 2007 | Pereira  | Rome   | 1004 |
| 2008 | Cisneros | Sanjose| 1007 |
+------+----------+--------+------+
7 rows in set (0.01 sec)
```

Table 3: Orders

Onum is Primary key

Cnum is foreign key refers to Cnum column of Customers table. **Snum** is foreign key refers Snum column of SalesPeople table.

CREATE TABLE orders(Onum int,Amt float,Odate date, Cnum int, Snum int, PRIMARY KEY (Onum),FOREIGN KEY (Cnum) REFERENCES customers(Cnum), FOREIGN KEY (Snum) REFERENCES salespeople(Snum));

Onum	**Amt**	**Odate**	**Cnum**	**Snum**
3001	18.69	3-10-1990	2008	1007
3003	767.19	3-10-1990	2001	1001
3002	1900.10	3-10-1990	2007	1004

3005	5160.45	3-10-1990	2003	1002
3006	1098.16	3-10-1990	2008	1007
3009	1713.23	4-10-1990	2002	1003
3007	75.75	4-10-1990	2004	1002
3008	4273.00	5-10-1990	2006	1001
3010	1309.95	6-10-1990	2004	1002
3011	9891.88	6-10-1990	2006	1001

```
mysql> select * from orders;
+------+---------+------------+------+------+
| Onum | Amt     | Odate      | Cnum | Snum |
+------+---------+------------+------+------+
| 3001 |   18.69 | 1990-10-03 | 2008 | 1007 |
| 3002 |  1900.1 | 1990-10-03 | 2007 | 1004 |
| 3003 |  767.19 | 1990-10-03 | 2001 | 1001 |
| 3005 | 5160.45 | 1990-10-03 | 2003 | 1002 |
| 3006 | 1098.16 | 1990-10-03 | 2008 | 1007 |
| 3007 |   75.75 | 1990-10-04 | 2004 | 1002 |
| 3008 |    4273 | 1990-10-05 | 2006 | 1001 |
| 3009 | 1713.23 | 1990-10-04 | 2002 | 1003 |
| 3010 | 1309.95 | 1990-10-06 | 2004 | 1002 |
| 3011 | 9891.88 | 1990-10-06 | 2006 | 1001 |
+------+---------+------------+------+------+
10 rows in set (0.01 sec)
```

On the basis of above tables perform given below questions

1. Count the number of Salesperson whose name begin with **'a'/'A'**.

   SELECT count(sname) FROM salespeople where sname like 'A%';

```
mysql> SELECT count(sname) FROM salespeople where sname like 'A%';
+--------------+
| count(sname) |
+--------------+
|            1 |
+--------------+
1 row in set (0.00 sec)
```

2. Display all the Salesperson whose all orders worth is more than Rs. 2000.

   select orders.snum,sname,sum(amt) from orders right join salespeople on orders.snum=salespeople.snum group by snum having sum(amt)>2000;

```
mysql> select orders.snum,sname,sum(amt) from orders right join salespeople on orders.snum=salespeople.snum group by snum having sum(amt)>2000;
+------+--------+--------------------+
| snum | sname  | sum(amt)           |
+------+--------+--------------------+
| 1001 | Peel   | 14932.069885253906 |
| 1002 | Serres |  6546.150146484375 |
+------+--------+--------------------+
2 rows in set (0.00 sec)
```

3. Count the number of Salesperson belonging to **Newyork**.

   SELECT COUNT(Sname) FROM salespeople where City='Newyork';

```
mysql> SELECT COUNT(Sname) FROM salespeople where City='Newyork';
+--------------+
| COUNT(Sname) |
+--------------+
|            1 |
+--------------+
1 row in set (0.00 sec)
```

4. Display the number of Salespeople belonging to **London** and belonging to **Paris**.

   SELECT snum FROM salespeople where City='London' or City='Paris';

```
mysql> SELECT snum FROM salespeople where City='London' or City='Paris';
+------+
| snum |
+------+
| 1001 |
| 1004 |
+------+
2 rows in set (0.00 sec)
```

5. Display the number of orders taken by each Salesperson and their date of orders.

   To display num of orders by each salesperson-

select sname,count(onum) from salespeople right join orders on orders.snum=salespeople.snum group by sname;

To display salesperson and their date of orders-

select sname,odate from salespeople right join orders on orders.snum=salespeople.snum order by sname;

```
mysql> select sname,count(onum) from salespeople right join orders on orders.snum=salespeople.snum group by sname;
+---------+-------------+
| sname   | count(onum) |
+---------+-------------+
| Peel    |           3 |
| Serres  |           3 |
| Axelrod |           1 |
| Motika  |           1 |
| Rifkin  |           2 |
+---------+-------------+
5 rows in set (0.00 sec)

mysql> select sname,odate from salespeople right join orders on orders.snum=salespeople.snum order by sname;
+---------+------------+
| sname   | odate      |
+---------+------------+
| Axelrod | 1990-10-04 |
| Motika  | 1990-10-03 |
| Peel    | 1990-10-03 |
| Peel    | 1990-10-05 |
| Peel    | 1990-10-06 |
| Rifkin  | 1990-10-03 |
| Rifkin  | 1990-10-03 |
| Serres  | 1990-10-03 |
| Serres  | 1990-10-04 |
| Serres  | 1990-10-06 |
+---------+------------+
10 rows in set (0.00 sec)
```