Assignment MySQL

Table 1: SalesPeople

Snum is Primary key

Sname is Unique constraint

Snum Sname City Comm

1001 Peel. London .12

1002 Serres Sanjose .13

1004 Motika London .11

1007 Rifkin Barcelona .15

1003 Axelrod Newyork .10

Syntax:

```
CREATE TABLE salespeople (
Snum INT PRIMARY KEY,
Sname VARCHAR(30) UNIQUE ,
City VARCHAR(30),
Comm INT
);
```

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

mysql> desc salespeople;
+-------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
| Snum  | int         | NO   | PRI | NULL    |       |
| Sname | varchar(30) | YES  | UNI | NULL    |       |
| City  | varchar(30) | YES  |     | NULL    |       |
| Comm  | int         | YES  |     | NULL    |       |
+-------+-------------+------+-----+---------+-------+
4 rows in set (0.27 sec)
```

Table 2: Customers

Cnum is Primary Key

City has not null constraint .

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

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

Syntax:

Create Table Customers(Cnum INT PRIMAY KEY,

Cname VARCHAR(30),

City VARCHAR(30) NOT NULL,

Snum INT,

FOREIGN KEY (Snum) REFERENCES Salespeople(Snum)

);

```
ysql> desc customers;
+------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+------+-------------+------+-----+---------+-------+
| Cnum  | int         | NO   | PRI | NULL    |       |
| Cname | varchar(30) | YES  |     | NULL    |       |
| City  | varchar(30) | NO   |     | NULL    |       |
| Snum  | int         | YES  | MUL | NULL    |       |
+------+-------------+------+-----+---------+-------+
rows in set (0.10 sec)

ysql> 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 |
+-----+----------+---------+------+
rows in set (0.12 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.

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

Syntax:

```
CREATE TABLE orders (
Onum INT PRIMARY KEY,
Amt decimal(6,2),
Odate VARCHAR(10) NOT NULL,
```

Cnum INT NOT NULL,

Snum INT NOT NULL,

FOREIGN KEY (Cnum) REFERENCES Customers(Cnum),

FOREIGN KEY (Snum) REFERENCES Salespeople(Snum)

);

```
mysql> desc orders;
+-------+--------------+------+-----+---------+-------+
| Field | Type         | Null | Key | Default | Extra |
+-------+--------------+------+-----+---------+-------+
| Onum  | int          | NO   | PRI | NULL    |       |
| Amt   | decimal(6,2) | YES  |     | NULL    |       |
| Odate | varchar(10)  | NO   |     | NULL    |       |
| Cnum  | int          | NO   | MUL | NULL    |       |
| Snum  | int          | NO   | MUL | NULL    |       |
+-------+--------------+------+-----+---------+-------+
5 rows in set (0.01 sec)

mysql> select * from orders;
+------+---------+-----------+------+------+
| Onum | Amt     | Odate     | Cnum | Snum |
+------+---------+-----------+------+------+
| 3001 |   18.69 | 3-10-1990 | 2008 | 1007 |
| 3002 | 1900.10 | 3-10-1990 | 2007 | 1004 |
| 3003 |  767.19 | 3-10-1990 | 2001 | 1001 |
| 3005 | 5160.45 | 3-10-1990 | 2003 | 1002 |
| 3006 | 1098.16 | 3-10-1990 | 2008 | 1007 |
| 3007 |   75.75 | 4-10-1990 | 2004 | 1002 |
| 3008 | 4273.00 | 5-10-1990 | 2006 | 1001 |
| 3009 | 1713.23 | 4-10-1990 | 2002 | 1003 |
| 3010 | 1309.95 | 6-10-1990 | 2004 | 1002 |
| 3011 | 9891.88 | 6-10-1990 | 2006 | 1001 |
+------+---------+-----------+------+------+
10 rows in set (0.00 sec)
```

On the basis of above tables specific tasks has been performed according to the questions:

1. Count the number of Salesperson whose name begin with ‘a’/’A’.

```
mysql> select count(*) from SalesPeople where Sname like 'a%' or Sname like 'A%';
+----------+
| count(*) |
+----------+
|        1 |
+----------+
1 row in set (0.44 sec)
```

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

```
mysql> select SalesPeople.Sname from SalesPeople inner join orders on SalesPeople.Snum=orders.Snum;
+---------+
| Sname   |
+---------+
| Axelrod |
| Motika  |
| Peel    |
| Peel    |
| Peel    |
| Rifkin  |
| Rifkin  |
| Sserres |
| Sserres |
| Sserres |
+---------+
10 rows in set (0.00 sec)
```

3. Count the number of Salesperson belonging to Newyork.

```
mysql> select Sname from SalesPeople where City='Newyork';
+----------+
| Sname    |
+----------+
| Axelrod |
+----------+
1 row in set (0.00 sec)
```

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

```
mysql> select count(Sname) from SalesPeople where City='London' and City='Paris';
+--------------+
| count(Sname) |
+--------------+
|            0 |
+--------------+
1 row in set (0.00 sec)
```

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

```
mysql> SELECT Odate,Snum,COUNT(*)
    -> FROM orders
    -> GROUP BY Odate,Snum;
+------------+------+----------+
| Odate      | Snum | COUNT(*) |
+------------+------+----------+
| 3-10-1990 | 1007 |        2 |
| 3-10-1990 | 1004 |        1 |
| 3-10-1990 | 1001 |        1 |
| 3-10-1990 | 1002 |        1 |
| 4-10-1990 | 1002 |        1 |
| 5-10-1990 | 1001 |        1 |
| 4-10-1990 | 1003 |        1 |
| 6-10-1990 | 1002 |        1 |
| 6-10-1990 | 1001 |        1 |
+-----------+------+----------+
9 rows in set (0.03 sec)
```