Table 1: SalesPeople, Table 2: Customers, Table 3: Orders

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

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

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

CREATE DATABASE assignment;

USE assignment;

CREATE TABLE salespeople

(snum INT PRIMARY KEY,

sname VARCHAR(20) UNIQUE,

city VARCHAR(20),

comm INT);

INSERT INTO salespeople VALUES

(1001,'Peel','london',12),(1002,'Serres','sanjose',13),(1004,'Motika','london',11),

(1007,'Rifkin','Barcelona',15),(1003,'Axelrod','Newyork',10);

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 |

+------+---------+-----------+------+

CREATE TABLE customers

(cnum INT PRIMARY KEY,

cname VARCHAR(20),

city VARCHAR(10) NOT NULL,

snum INT,

FOREIGN KEY (snum) REFERENCES salespeople(snum) ON DELETE SET NULL);

INSERT INTO customers VALUES

(2002,'Giovanni','Rome',1003),

(2003,'Liu','Sanjose',1002),

(2004,'Grass','Berlin',1002),

(2006,'Clemens','London',1001),

(2008,'Cisneros','Sanjose',1007),

(2007,'Pereira','Rome',1004);

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 |

+------+----------+---------+------+

CREATE TABLE orders

(onum INT PRIMARY KEY,

amt FLOAT(10,2),

odate DATE,

cnum INT,

snum INT,

FOREIGN KEY(cnum) REFERENCES customers(cnum) ON DELETE SET NULL,

FOREIGN KEY(snum) REFERENCES salespeople(snum) ON DELETE SET NULL);

INSERT INTO orders VALUES

(3001,18.69,'1990-10-3',2008,1007),

(3003,767.19,'1990-10-3',2001,1001),

(3002,1900.10,'1990-10-3',2007,1004),

(3005,5160.45,'1990-10-3',2003,1002),

(3006,1098.16,'1990-10-3',2008,1007),

(3009,1713.23,'1990-10-4',2002,1003),

(3007,75.75,'1990-10-4',2004,1002),

(3008,4273.00,'1990-10-5',2006,1001),

(3010,1309.95,'1990-10-6',2004,1002),

(3011,9891.88,'1990-10-6',2006,1001);

SELECT \* FROM orders;

+------+---------+------------+------+------+

| onum | amt | odate | cnum | snum |

+------+---------+------------+------+------+

| 3001 | 18.69 | 1990-10-03 | 2008 | 1007 |

| 3002 | 1900.10 | 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 | 4273.00 | 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 |

+------+---------+------------+------+------+

describe salespeople;

+-------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+-------------+------+-----+---------+-------+

| snum | int | NO | PRI | NULL | |

| sname | varchar(20) | YES | UNI | NULL | |

| city | varchar(20) | YES | | NULL | |

| comm | int | YES | | NULL | |

+-------+-------------+------+-----+---------+-------+

4 rows in set (0.01 sec)

mysql> describe customers;

+-------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+-------------+------+-----+---------+-------+

| cnum | int | NO | PRI | NULL | |

| cname | varchar(20) | YES | | NULL | |

| city | varchar(10) | NO | | NULL | |

| snum | int | YES | MUL | NULL | |

+-------+-------------+------+-----+---------+-------+

4 rows in set (0.00 sec)

mysql> describe orders;

+-------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+-------------+------+-----+---------+-------+

| onum | int | NO | PRI | NULL | |

| amt | float(10,2) | YES | | NULL | |

| odate | date | YES | | NULL | |

| cnum | int | YES | MUL | NULL | |

| snum | int | YES | MUL | NULL | |

+-------+-------------+------+-----+---------+-------+

5 rows in set (0.00 sec)

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

SELECT sname, COUNT(sname) from salespeople where sname LIKE 'A%' GROUP BY sname;

---------+--------------+

| sname | COUNT(sname) |

+---------+--------------+

| Axelrod | 1 |

+---------+--------------+

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

SELECT salespeople.sname, orders.snum, orders.amt from orders,salespeople WHERE orders.amt>2000 AND orders.snum=salespeople.snum;

--------+------+---------+

| sname | snum | amt |

+--------+------+---------+

| Serres | 1002 | 5160.45 |

| Peel | 1001 | 4273.00 |

| Peel | 1001 | 9891.88 |

+--------+------+---------+

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

select sname,city, count(snum) from salespeople where city = 'Newyork';

+---------+---------+-------------+

| sname | city | count(snum) |

+---------+---------+-------------+

| Axelrod | Newyork | 1 |

+---------+---------+-------------+

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

select city, count(sname) from salespeople where city = 'london' or city = 'paris';

--------+--------------+

| city | count(sname) |

+--------+--------------+

| london | 2 |

+--------+--------------+

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

SELECT orders.snum, salespeople.sname, COUNT(odate) FROM orders,salespeople WHERE orders.snum = salespeople.snum GROUP BY salespeople.snum;

+------+---------+--------------+

| snum | sname | COUNT(odate) |

+------+---------+--------------+

| 1001 | Peel | 3 |

| 1002 | Serres | 3 |

| 1003 | Axelrod | 1 |

| 1004 | Motika | 1 |

| 1007 | Rifkin | 2 |

+------+---------+--------------+