SQL Assignment

1. Display snum,sname,city and comm of all salespeople.

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT Snum, Sname, City, Comm

FROM Salespeople.

#### Display all snum without duplicates from all orders.

#### CREATE TABLE Orders (

#### Onum INT NOT NULL,

#### AMT FLOAT NOT NULL,

#### Odate DATE NOT NULL,

#### Cnum INT NOT NULL,

#### Snum INT NOT NULL,

#### CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

#### CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

#### CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

#### );

#### INSERT INTO Orders VALUES

#### (3001,18.69,'03-OCT-94',2004,1007),

#### (3003,767.19,'03-OCT-94',2001,1001),

#### (3002,1900.10,'03-OCT-94',2007,1004),

#### (3005,5160.45,'03-OCT-94',2003,1002),

#### (3006,1098.16,'04-OCT-94',2004,1007),

#### (3009,1713.23,'04-OCT-94',2002,1003),

#### (3007,75.75,'05-OCT-94',2004,1002),

#### (3008,4723.00,'05-OCT-94',2006,1001),

#### (30010,1309.95,'06-OCT-94',2004,1002),

#### (30011,9891.88,'06-OCT-94',2006,1001).

#### SELECT DISTINCT Snum

#### FROM Orders.

#### Display names and commissions of all salespeople in London.

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

GO

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT Snum, Comm

FROM Salespeople

WHERE City = 'London’.

GO

#### All customers with rating of 100.

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers

VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

SELECT Cname

FROM Customers

WHERE Rating = 100.

#### Produce orderno, amount and date form all rows in the order table.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT Onum, AMT, Odate

FROM Orders.

6. All customers in San Jose, who have rating more than 200

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

SELECT Cname, City, Rating

FROM Customers

WHERE City = 'San Jose' AND Rating > 200.

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

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

SELECT Cname, City, Rating

FROM Customers

WHERE City = 'San Jose' OR Rating > 200.

GO

8. All orders for more than $1000.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT \*

FROM Orders

WHERE AMT > 1000.

9. Names and cites of all salespeople in London with commission above 0.10.

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT Sname, City, Comm

FROM Salespeople

WHERE City = 'London' AND Comm > 0.10.

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

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004);

SELECT Cname, City, Rating

FROM Customers

WHERE Rating <= 100 OR City = 'Rome’.

#### (11.) All salespeople either in Barcelona or in London.

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT Sname, City

FROM Salespeople

WHERE City IN ('Barcelona’, ‘London').

#### (12.) All salespeople with commission between 0.10 and 0.12.

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

GO

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT Sname, Comm

FROM Salespeople

WHERE Comm > 0.10 AND Comm < 0.12.

#### (13.) All customers with NULL values in city column.

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

SELECT Cname, City

FROM Customers

WHERE City IS NULL.

#### (14.) All orders taken on Oct 3Rd and Oct 4th, 1994.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT \*

FROM Orders

WHERE Odate IN ('03-OCT-94','04-OCT-94').

#### (15.) All customers serviced by peel or Motika

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT Cname

FROM Customers, Orders

WHERE Orders.Cnum = Customers.Cnum

AND Orders.Snum IN (SELECT Snum FROM Salespeople WHERE Sname IN ('Peel','Motika')).

#### (16.) [All customers whose names begin with a letter from A to B.](https://java.jalaacademy.com/db/interview_sql.html#collapseEighteen)

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

SELECT Cname

FROM Customers

WHERE Cname LIKE 'A%' OR Cname LIKE 'B%’.

#### (17.) All orders except those with 0 or NULL value in amt field.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT \*

FROM Orders

WHERE AMT! = 0 OR AMT IS NOT NULL.

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

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT COUNT (DISTINCT Snum) AS 'salespeople currently listing orders'

FROM Orders.

#### (19.) Largest order taken by each salesperson; date wise.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT Snum, Odate, MAX(AMT) AS 'Largest order'

FROM Orders

GROUP BY Odate, Snum

ORDER BY Odate,Snum;

#### (20.) Largest order taken by each salesperson with order value more than $3000.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT Snum, Odate, MAX(AMT) AS 'Largest order'

FROM Orders

WHERE AMT > 3000

GROUP BY Odate, Snum

ORDER BY Odate, Snum;

#### (21.) Which day had the highest total amount ordered.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT Odate, AMT, Snum, Cnum

FROM Orders

WHERE AMT = (SELECT MAX(AMT) FROM Orders).

#### (22.) count all orders for Oct 3rd.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT COUNT (\*) AS 'Orders on Oct 3rd'

FROM Orders

WHERE Odate = '03-OCT-94’.

#### (23.) Count the number of different non-NULL city values in customer’s table.

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

SELECT COUNT (DISTINCT City)

FROM Customers.

#### (24.) Select each customer’s smallest order.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT Cnum, MIN(AMT)

FROM Orders

GROUP BY Cnum.

#### (25.) First customer in alphabetical order whose name begins with G.

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

SELECT MIN(Cname)

FROM Customers

WHERE Cname LIKE 'G%’.

#### (26.) Get the output like "For dd/mm/yy there are orders.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT 'For’ (CONVERT (varchar (10), GETDATE (),120)) || 'there are' || COUNT (\*) || 'Orders'

FROM Orders

GROUP BY Odate;

#### (27.) Assume that each salesperson has a 12% commission. Produce order no., salesperson no., and amount of salesperson’s commission for that order.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT Onum, Snum, AMT, AMT \* 0.12 AS 'Commission'

FROM Orders

ORDER BY Snum.

#### (28.) Find highest rating in each city. Put the output in this form. For the city (city), the highest rating is: (rating).

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

Select 'For the city (' || City || '), the highest rating is: (' || MAX(Rating) || ')'

FROM Customers

GROUP BY city.

#### (29.) Display the totals of orders for each day and place the results in descending order.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT Odate, COUNT(Onum) AS 'Total No of Orders'

FROM Orders

GROUP BY Odate

ORDER BY COUNT(Onum) DESC.

#### (30.) All combinations of salespeople and customers who shared a city. (i.e., same city)

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

SELECT Sname, Cname, S.City AS City

FROM SalesPeople AS S, Customers AS C

WHERE S.City = C.City;

#### (31.) Name of all customers matched with the salespeople serving them.

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

SELECT Cname, Sname

FROM Customers AS C, SalesPeople AS S

WHERE C.Snum = S.Snum;

#### (32.) List each order number followed by the name of the customer who made the order.

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT Onum, Cname

FROM Customers AS C, Orders AS O

WHERE O.Cnum = C.Cnum;

#### (33.) Names of salesperson and customer for each order after the order number.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT Onum, Sname, Cname

FROM Orders AS O, Customers AS C, SalesPeople AS S

WHERE O.Cnum = C.Cnum and O.Snum = S.Snum;

#### (34.) Produce all customer serviced by salespeople with a commission above 12%.

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT Cname, Sname, Comm

FROM Customers AS C, SalesPeople AS S

WHERE Comm > 0.12 AND C.Snum = S.Snum;

#### (35.) Calculate the amount of the salesperson’s commission on each order with a rating above 100.

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT Sname, AMT\*Comm, Rating

FROM Customers AS C, Salespeople AS S, Orders AS O

WHERE Rating > 100 AND

S.Snum = C.Snum AND

S.Snum = O.Snum AND

O.Cnum = C.Cnum;

#### (36.) Find all pairs of customers having the same rating.

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

SELECT a.Cname, b.Cname, a.Rating

FROM Customers a, Customers b

WHERE a.Rating = b.Rating and a.Cnum != b.Cnum;

#### (37.) Policy is to assign three salespersons to each customer. Display all such combinations.

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

Select Cname, Sname

FROM SalesPeople, Customers

WHERE Sname IN (SELECT Sname FROM salespeople WHERE rownum <= 3)

ORDER BY Cname.

#### (38.) Display all customers located in cities where salesman serves has customer.

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

SELECT Cname

FROM Customers

WHERE City IN (SELECT City FROM Customers AS C, Orders AS O

WHERE C.Cnum = O.Cnum AND

O.Snum IN ( SELECT Snum FROM Salespeople

WHERE Sname = 'Serres')).

#### (39.) Find all pairs of customers served by single salesperson.

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT DISTINCT a.Cname

FROM Customers a, Customers b

WHERE a.Snum = b.Snum and a.Cnum != b.Cnum;

#### (40.) Produce all pairs of salespeople which are living in the same city. Exclude combinations of salespeople with themselves as well as duplicates with the order reversed.

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT a.Sname, b.Sname

FROM SalesPeople a, SalesPeople b

WHERE a.Snum > b.Snum AND a.City = b.City;

#### (41.) Produce names and cities of all customers with the same rating as Hoffman.

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

SELECT a.Sname, b.Sname

FROM SalesPeople a, SalesPeople b

WHERE a.Snum > b.Snum AND a.City = b.City;

#### (42.) Extract all the orders of Motika.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT Onum

FROM Orders

WHERE Snum = (SELECT Snum FROM Salespeople WHERE Sname = 'Motika');

#### (43.) All orders credited to the same salesperson who services Hoffman.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT Onum, sname, Cname, AMT

from Orders AS O, Salespeople AS S, Customers C

where O.Snum = S.Snum AND O.Cnum = C.Cnum AND

O.Snum = ( SELECT Snum FROM Orders

WHERE Cnum = (SELECT Cnum FROM Customers

WHERE Cname = 'Hoffman')).

#### (44.) All orders that are greater than the average for Oct 4.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT \*

FROM Orders

WHERE AMT > (SELECT AVG(AMT) FROM Orders

WHERE Odate = '03-OCT-94').

#### (45.) Find average commission of salespeople in London.

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT AVG(Comm)

FROM Salespeople

WHERE City = 'London’.

#### (46.) Find all orders attributed to salespeople servicing customers in London.

CREATE TABLE Orders (

Onum INT NOT NULL,

AMT FLOAT NOT NULL,

Odate DATE NOT NULL,

Cnum INT NOT NULL,

Snum INT NOT NULL,

CONSTRAINT PK\_Orders\_Onum PRIMARY KEY(Onum),

CONSTRAINT FK\_Orders\_Cnum FOREIGN KEY(Cnum) REFERENCES Customers (Cnum),

CONSTRAINT FK\_Orders\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Orders VALUES

(3001,18.69,'03-OCT-94',2004,1007),

(3003,767.19,'03-OCT-94',2001,1001),

(3002,1900.10,'03-OCT-94',2007,1004),

(3005,5160.45,'03-OCT-94',2003,1002),

(3006,1098.16,'04-OCT-94',2004,1007),

(3009,1713.23,'04-OCT-94',2002,1003),

(3007,75.75,'05-OCT-94',2004,1002),

(3008,4723.00,'05-OCT-94',2006,1001),

(30010,1309.95,'06-OCT-94',2004,1002),

(30011,9891.88,'06-OCT-94',2006,1001).

SELECT Snum, Cnum

FROM Orders

WHERE Cnum IN (SELECT Cnum FROM Customers WHERE City = 'London').

#### (47.) Extract commissions of all salespeople servicing customers in London.

CREATE TABLE Salespeople (

Snum INT NOT NULL PRIMARY KEY,

Sname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Comm FLOAT

);

INSERT INTO Salespeople VALUES

(1001,'Peel','London',0.12),

(1002,'Serres','San Jose',0.13),

(1004,'Motika','London',0.11),

(1007,'Rafkin','Barcelona',0.15),

(1003,'Axelrod','New york',0.1).

SELECT Comm

FROM Salespeople

WHERE Snum IN (SELECT Snum FROM Customers WHERE City = 'London').

#### (48.) Find all customers whose cnum is 1000 above the snum of serves.

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

SELECT Cnum, Cname from Customers

where Cnum > (SELECT Snum + 1000

FROM Salespeople

WHERE Sname = 'Serves').

#### (49.) Count the customers with rating above San Jose’s average.

CREATE TABLE Customers (

Cnum INT NOT NULL,

Cname VARCHAR (50) NOT NULL,

City VARCHAR (50),

Rating INT,

Snum INT NOT NULL,

CONSTRAINT PK\_Customers\_Cnum PRIMARY KEY(Cnum),

CONSTRAINT FK\_Customers\_Snum FOREIGN KEY(Snum) REFERENCES Salespeople (Snum)

);

INSERT INTO Customers

VALUES

(2001,'Hoffman','London',100,1001),

(2002,'Giovanne','Rome',200,1003),

(2003,'Liu','San Jose',300,1002),

(2004,'Grass','Brelin',100,1002),

(2006,'Clemens','London',300,1007),

(2007,'Pereira','Rome',100,1004).

#### SELECT cnum, rating from Customers

#### Where rating> (SELECT avg(rating)

#### FROM Customers

#### Where city=’San Jose’).