

ASSIGNMENT

(View)

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REG:2020CA089

- 1) A database is being constructed for storing sales information system which store the information of Client. The client have it own unique client number, client name, client addresses, city, address, pin code, state and total balance to be required to paid.

Consider the following schema:

Client (Client_ID, Client_Name, Address, City, Pin, State, Bal_Due)

```
CREATE TABLE client(CID varchar(20),Client_name varchar(30),address varchar(100),city varchar(30),pin int(4),state varchar(30),bal_due int(4));
```

```
INSERT INTO `client` (`CID`, `Client_name`, `address`, `city`, `pin`, `state`, `bal_due`) VALUES ('cn01001', 'shishu', 'indrapuri rd no 12', 'patna', '800024', 'bihr', '5000'), ('cn01002', 'rahul', 'punaichak patna 23', 'patna', '800023', 'bihar', '6000'), ('cn01003', 'manoj', 'allahabad up', 'allahabad', '440011', 'up', '5566');
```

Execute the following queries:

- a) Create a View called Client_View1 having all data of Client table.

```
CREATE VIEW client_view1 as SELECT * from client;
```

```
MariaDB [assign81]> select * from client_view1;
```

Client_Id	Client_name	address	city	pin	state	bal_due
cn01001	shishu	indrapuri rd no 12	patna	800024	bihr	5000
cn01002	rahul	punaichak patna 23	patna	800023	bihar	6000
cn01003	manoj	allahabad up	allahabad	440011	up	5566

3 rows in set (0.000 sec)

- b) Create a view called Client_vw2 having Client_ID , city and Bal_Due attributes of client table.

```
MariaDB [assign81]> create view client_vw2 as select Client_id,city,bal_due from client;  
Query OK, 0 rows affected (0.003 sec)
```

```
MariaDB [assign81]> select * from client_vw2;
```

Client_id	city	bal_due
cn01001	patna	5000
cn01002	patna	6000
cn01003	allahabad	5566

3 rows in set (0.001 sec)

- c) Create a view called Client_vw3 with renaming Client_ID as CID , Client_Name as cname and Address as Addr of client table.

```
MariaDB [assign81]> create view client_vw3 as select client_id as CID,client_name as cname,address as addr from client;  
Query OK, 0 rows affected (0.003 sec)
```

```
MariaDB [assign81]> select * from client_vw3;
```

CID	cname	addr
cn01001	shishu	indrapuri rd no 12
cn01002	rahul	punaichak patna 23
cn01003	manoj	allahabad up

3 rows in set (0.001 sec)

- d) Using Client_view1, print client_name and Balance of Client whose ID is 'cn01001'.

```
MariaDB [assign81]> select client_name,bal_due from client_view1 where client_id='cn01001';
+-----+-----+
| Client_name | bal_due |
+-----+-----+
| shishu      | 5000    |
+-----+-----+
1 row in set (0.000 sec)
```

- e) Insert a row into Client_vw2 ('cn02003', 'alld', 5000).

```
MariaDB [assign81]> insert into client_vw2 values('cn02003', 'alld', 5000);
Query OK, 1 row affected (0.003 sec)
```

- f) Modify view Client_vw2 such that bal_due of Client_ID CN01004 now become 1000.

```
MariaDB [assign81]> select * from client_vw2 where client_id='cn01004';
+-----+-----+-----+
| Client_id | city      | bal_due |
+-----+-----+-----+
| cn01004   | banglore | 3000    |
+-----+-----+-----+
1 row in set (0.000 sec)

MariaDB [assign81]> update client_vw2 set bal_due=1000 where client_id='cn01004';
Query OK, 1 row affected (0.002 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

- g) Delete row from view client_vw2 where Client_ID='CN02003'.

```
MariaDB [assign81]> delete from client_vw2 where client_id='cn02003';
Query OK, 1 row affected (0.003 sec)
```

- h) Delete view client_vw3 from memory.

```
MariaDB [assign81]> drop view client_vw3;
Query OK, 0 rows affected (0.001 sec)
```

- i) Consider another table Client2 (ClientID, Phone). Create a view client_vw4 which has clientID, Client_name, bal_due and phone. Use both The tables Client and Client2.

```
MariaDB [assign81]> create table client2 (clientId varchar(50),phone varchar(12),constraint fk_client foreign key(clientid) references client(client_id) on delete cascade on update cascade);
Query OK, 0 rows affected (0.022 sec)
```

```
MariaDB [assign81]> create view client_vw4 as select client.client_id,client2.phone,client.bal_due from client,
client2 where client.client_id=client2.clientId;
Query OK, 0 rows affected (0.003 sec)
```

```
MariaDB [assign81]> select * from client_vw4;
+-----+-----+-----+
| client_id | phone      | bal_due |
+-----+-----+-----+
| cn01001   | 7519308095 | 300     |
| cn01002   | 9006652906 | 6000    |
| cn01003   | 8227004563 | 5566    |
| cn01004   | 9835640718 | 1000    |
+-----+-----+-----+
4 rows in set (0.001 sec)
```

- 2) A database is being constructed for storing **sales information system**. The customer who buy the item or order the item have it own unique customer id, customer name, customer city, grade and salesman id of those salesman from which they buy the item. Each customer order is to buy item from the salesman. In the order, it has unique sales order number, sales order date, customer id, salesman id and purchase amount to be paid. The elistsalesman have salesman id, name, city and

commission which shows the personal details of all salesman.

Consider the following schema:

CUSTOMER (c_id, c_name, city, grade, s_id)

SALESMAN (s_id, name, city, commission)

ORDERS (o_no, purchase_amt, o_date, c_id, s_id)

ELITSALESMAN (s_id, name, city, commission)

CUSTOMER

```
CREATE TABLE CUSTOMER(C_ID INT(5) PRIMARY KEY, C_NAME VARCHAR(30), CITY  
VARCHAR(15),
```

```
Administrator: XAMPP for Windows - mysql -u root -p

MariaDB [MCA]> CREATE TABLE CUSTOMER(C_ID INT(5) PRIMARY KEY, C_NAME VARCHAR(30),
CITY VARCHAR(15), GRADE INT(3), S_ID INT(5));
Query OK, 0 rows affected (1.835 sec)

MariaDB [MCA]> DESC CUSTOMER;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| C_ID  | int(5)        | NO   | PRI | NULL    |       |
| C_NAME | varchar(30)    | YES  |     | NULL    |       |
| CITY  | varchar(15)    | YES  |     | NULL    |       |
| GRADE | int(3)         | YES  |     | NULL    |       |
| S_ID  | int(5)         | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.145 sec)

MariaDB [MCA]>
```

INSERT INTO CUSTOMER

```
(3002, 'Nick Rimando', 'New York', 100, 5001),
(3007, 'Brad Davis', 'New York', 200, 5001),
(3005, 'Graham Zusi', 'California', 200, 5002),
(3008, 'Julian Green', 'London', 300, 5002),
(3004, 'Fabian Johnson', 'Paris', 300, 5006),
(3009, 'Geoff Cameron', 'Berlin', 100, 5003),
(3003, 'Jozy Altidor', 'Moscow', 200, 5007),
(3001, 'Brad Guzan'
```

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> INSERT INTO CUSTOMER VALUES
-> (3002, 'Nick Rimando', 'New York', 100, 5001),
-> (3007, 'Brad Davis', 'New York', 200, 5001),
-> (3005, 'Graham Zusi', 'California', 200, 5002),
-> (3008, 'Julian Green', 'London', 300, 5002),
-> (3004, 'Fabian Johnson', 'Paris', 300, 5006),
-> (3009, 'Geoff Cameron', 'Berlin', 100, 5003),
-> (3003, 'Jozy Altidor', 'Moscow', 200, 5007),
-> (3001, 'Brad Guzan', 'London', 300, 5005);
Query OK, 8 rows affected (0.095 sec)
Records: 8 Duplicates: 0 Warnings: 0

MariaDB [MCA]> SELECT * FROM CUSTOMER;
+-----+-----+-----+-----+-----+
| C_ID | C_NAME      | CITY      | GRADE | S_ID |
+-----+-----+-----+-----+-----+
| 3001 | Brad Guzan   | London    | 300   | 5005 |
| 3002 | Nick Rimando | New York  | 100   | 5001 |
| 3003 | Jozy Altidor | Moscow    | 200   | 5007 |
| 3004 | Fabian Johnson | Paris    | 300   | 5006 |
| 3005 | Graham Zusi  | California | 200   | 5002 |
| 3007 | Brad Davis   | New York  | 200   | 5001 |
| 3008 | Julian Green | London    | 300   | 5002 |
| 3009 | Geoff Cameron | Berlin    | 100   | 5003 |
+-----+-----+-----+-----+-----+
8 rows in set (0.000 sec)

MariaDB [MCA]> _
```

SALESMAN

```
CREATE TABLE SALESMAN(S_ID INT(5) PRIMARY KEY, NAME VARCHAR(30), CITY VARCHAR(15),
```

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE TABLE SALESMAN(S_ID INT(5) PRIMARY KEY, NAME VARCHAR(30), CITY VARCHAR(15), COMMISSION FLOAT(5,2));
Query OK, 0 rows affected (0.771 sec)

MariaDB [MCA]> DESC SALESMAN;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| S_ID       | int(5)        | NO   | PRI | NULL    |       |
| NAME       | varchar(30)   | YES  |     | NULL    |       |
| CITY       | varchar(15)   | YES  |     | NULL    |       |
| COMMISSION | float(5,2)    | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.064 sec)

MariaDB [MCA]>
```



```
INSERT INTO SALESMAN VALUES
```

```
(5001, 'James Hoog', 'New York', 0.15),  
(5002, 'Nail Knite', 'Paris', 0.13),  
(5005, 'Pit Alex', 'London', 0.11),  
(5006, 'Mc Lyon', 'Paris', 0.14),  
(5007, 'Paul Adam', 'Rome', 0.13),  
(5003, 'Lauson Hen', 'San Jose', 0.12);
```

```
Administrator: XAMPP for Windows - mysql -u root -p  
MariaDB [MCA]> INSERT INTO SALESMAN VALUES  
-> (5001, 'James Hoog', 'New York', 0.15),  
-> (5002, 'Nail Knite', 'Paris', 0.13),  
-> (5005, 'Pit Alex', 'London', 0.11),  
-> (5006, 'Mc Lyon', 'Paris', 0.14),  
-> (5007, 'Paul Adam', 'Rome', 0.13),  
-> (5003, 'Lauson Hen', 'San Jose', 0.12);  
Query OK, 6 rows affected (0.358 sec)  
Records: 6 Duplicates: 0 Warnings: 0  
  
MariaDB [MCA]> SELECT * FROM SALESMAN;  
+-----+-----+-----+-----+  
| S_ID | NAME      | CITY      | COMMISSION |  
+-----+-----+-----+-----+  
| 5001 | James Hoog | New York  | 0.15       |  
| 5002 | Nail Knite | Paris     | 0.13       |  
| 5003 | Lauson Hen | San Jose  | 0.12       |  
| 5005 | Pit Alex   | London    | 0.11       |  
| 5006 | Mc Lyon    | Paris     | 0.14       |  
| 5007 | Paul Adam  | Rome      | 0.13       |  
+-----+-----+-----+-----+  
6 rows in set (0.001 sec)  
  
MariaDB [MCA]> _
```

ORDERS

```
CREATE TABLE ORDERS(O_NO INT(5) PRIMARY KEY, PURCHASE_AMT FLOAT(8,2), OR  
DATE, C_ID
```

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE TABLE ORDERS(O_NO INT(5) PRIMARY KEY, PURCHASE_AMT FLOAT(8,2), ORD_DATE DATE, C_ID INT(5), S_ID INT(5));
Query OK, 0 rows affected (0.569 sec)

MariaDB [MCA]> DESC ORDERS;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| O_NO       | int(5)    | NO   | PRI | NULL    |       |
| PURCHASE_AMT | float(8,2) | YES  |     | NULL    |       |
| ORD_DATE   | date      | YES  |     | NULL    |       |
| C_ID       | int(5)    | YES  |     | NULL    |       |
| S_ID       | int(5)    | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.052 sec)

MariaDB [MCA]> _
```

```
INSERT INTO ORDERS (O_NO, PURCHASE_AMT, ORD_DATE, C_ID, S_ID) VALUES
(70001, 150.5, '2012-10-05', 3005, 5002),
(70009, 270.65, '2012-09-10', 3001, 5005),
(70002, 65.26, '2012-10-05', 3002, 5001),
(70004, 110.5, '2012-08-17', 3009, 5003),
(70007, 948.5, '2012-09-10', 3005, 5002),
(70005, 2400.6, '2012-07-27', 3007, 5001),
(70008, 5760, '2012-09-10', 3002, 5001),
(70010, 1983.4, '2012-10-10', 3004, 5006),
(70003, 2480.4, '2012-10-10', 3009, 5003),
(70012, 250.45, '2012-06-27', 3008, 5002),
(70011, 75.29, '2012-08-17', 3003, 5007),
(70013, 3045.6, '2012-04-25', 3002, 5001);
```

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> INSERT INTO ORDERS VALUES
-> (70001, 150.5 , '2012-10-05', 3005, 5002),
-> (70009, 270.65, '2012-09-10', 3001, 5005),
-> (70002, 65.26 , '2012-10-05', 3002, 5001),
-> (70004, 110.5 , '2012-08-17', 3009, 5003),
-> (70007, 948.5 , '2012-09-10', 3005, 5002),
-> (70005, 2400.6, '2012-07-27', 3007, 5001),
-> (70008, 5760 , '2012-09-10', 3002, 5001),
-> (70010, 1983.4, '2012-10-10', 3004, 5006),
-> (70003, 2480.4, '2012-10-10', 3009, 5003),
-> (70012, 250.45, '2012-06-27', 3008, 5002),
-> (70011, 75.29 , '2012-08-17', 3003, 5007),
-> (70013, 3045.6, '2012-04-25', 3002, 5001);
Query OK, 12 rows affected (0.295 sec)
Records: 12 Duplicates: 0 Warnings: 0

MariaDB [MCA]> SELECT * FROM ORDERS;
+-----+-----+-----+-----+-----+
| O_NO | PURCHASE_AMT | ORD_DATE | C_ID | S_ID |
+-----+-----+-----+-----+-----+
| 70001 | 150.50 | 2012-10-05 | 3005 | 5002 |
| 70002 | 65.26 | 2012-10-05 | 3002 | 5001 |
| 70003 | 2480.40 | 2012-10-10 | 3009 | 5003 |
| 70004 | 110.50 | 2012-08-17 | 3009 | 5003 |
| 70005 | 2400.60 | 2012-07-27 | 3007 | 5001 |
| 70007 | 948.50 | 2012-09-10 | 3005 | 5002 |
| 70008 | 5760.00 | 2012-09-10 | 3002 | 5001 |
| 70009 | 270.65 | 2012-09-10 | 3001 | 5005 |
| 70010 | 1983.40 | 2012-10-10 | 3004 | 5006 |
| 70011 | 75.29 | 2012-08-17 | 3003 | 5007 |
| 70012 | 250.45 | 2012-06-27 | 3008 | 5002 |
| 70013 | 3045.60 | 2012-04-25 | 3002 | 5001 |
+-----+-----+-----+-----+-----+
12 rows in set (0.000 sec)
```

ELITSALESMAN

```
CREATE TABLE ELITSALESMAN(S_ID INT(5) PRIMARY KEY, NAME VARCHAR(30), CIT
VARCHAR(15),
```



```
Administrator: XAMPP for Windows - mysql -u root -p

MariaDB [MCA]> CREATE TABLE ELITSALESMAN(S_ID INT(5) PRIMARY KEY, NAME VARCHAR(30), CITY VARCHAR(15), COMMISSION FLOAT(5,2));
Query OK, 0 rows affected (0.585 sec)

MariaDB [MCA]> DESC ELITSALESMAN;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| S_ID       | int(5)        | NO   | PRI | NULL    |       |
| NAME       | varchar(30)   | YES  |     | NULL    |       |
| CITY       | varchar(15)   | YES  |     | NULL    |       |
| COMMISSION | float(5,2)    | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.014 sec)

MariaDB [MCA]> _
```

```
INSERT INTO ELITSALESMAN VALUES
(5001, 'James Hoog', 'New York', 0.15),
(5002, 'Nail Knite', 'Paris', 0.13),
(5005, 'Pit Alex', 'London', 0.11),
(5006, 'Mc Lyon', 'Paris', 0.14),
(5007, 'Paul Adam', 'Rome', 0.13),
(5003, 'Lauson Hen', 'San Jose', 0.12);
```

```
Administrator: XAMPP for Windows - mysql -u root -p

MariaDB [MCA]> INSERT INTO ELITSALESMAN VALUES
-> (5001, 'James Hoog', 'New York', 0.15),
-> (5002, 'Nail Knite', 'Paris', 0.13),
-> (5005, 'Pit Alex', 'London', 0.11),
-> (5006, 'Mc Lyon', 'Paris', 0.14),
-> (5007, 'Paul Adam', 'Rome', 0.13),
-> (5003, 'Lauson Hen', 'San Jose', 0.12);
Query OK, 6 rows affected (0.099 sec)
Records: 6 Duplicates: 0 Warnings: 0

MariaDB [MCA]> SELECT * FROM ELITSALESMAN;
+-----+-----+-----+-----+
| S_ID | NAME      | CITY    | COMMISSION |
+-----+-----+-----+-----+
| 5001 | James Hoog | New York | 0.15       |
| 5002 | Nail Knite | Paris    | 0.13       |
| 5003 | Lauson Hen | San Jose | 0.12       |
| 5005 | Pit Alex   | London   | 0.11       |
| 5006 | Mc Lyon    | Paris    | 0.14       |
| 5007 | Paul Adam  | Rome     | 0.13       |
+-----+-----+-----+-----+
6 rows in set (0.001 sec)

MariaDB [MCA]> _
```

a) Create a view for those salesmen who belong to the city 'New York'.

```
CREATE VIEW NewYorkStaff AS SELECT * FROM salesman WHERE city = 'New York'
```

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE VIEW NewYorkStaff AS SELECT * FROM salesman WHERE city = 'New York';
Query OK, 0 rows affected (0.164 sec)

MariaDB [MCA]> SELECT * FROM NEWYORKSTAFF;
+-----+-----+-----+-----+
| S_ID | NAME      | CITY    | COMMISSION |
+-----+-----+-----+-----+
| 5001 | James Hoog | New York | 0.15       |
+-----+-----+-----+-----+
1 row in set (0.060 sec)

MariaDB [MCA]>
```

b) Create a view for all salesmen with columns salesman_id, name and city.

```
CREATE VIEW salesown AS SELECT s_id, name, city FROM salesman;
```

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE VIEW salesown AS SELECT s_id, name, city FROM salesman;
Query OK, 0 rows affected (0.039 sec)

MariaDB [MCA]> SELECT * FROM SALESOWN;
+-----+-----+-----+
| s_id | name      | city    |
+-----+-----+-----+
| 5001 | James Hoog | New York |
| 5002 | Nail Knite | Paris    |
| 5003 | Lauson Hen | San Jose |
| 5005 | Pit Alex   | London   |
| 5006 | Mc Lyon    | Paris    |
| 5007 | Paul Adam   | Rome     |
+-----+-----+-----+
6 rows in set (0.001 sec)

MariaDB [MCA]>
```

c) Find the salesmen of the city New York who achieved the commission more than 13%.

```
SELECT * FROM SALESMAN WHERE CITY='NEW YORK' AND COMMISSION > 0.13;
```

```
Administrator: XAMPP for Windows - mysql -u root -p

MariaDB [MCA]> SELECT * FROM SALESMAN WHERE CITY='NEW YORK' AND COMMISSION > 0.13;
+-----+-----+-----+-----+
| S_ID | NAME      | CITY    | COMMISSION |
+-----+-----+-----+-----+
| 5001 | James Hoog | New York | 0.15       |
+-----+-----+-----+-----+
1 row in set (0.056 sec)

MariaDB [MCA]>
```

d) Create a view to getting a count of how many customers we have at each level of a grade.

```
CREATE VIEW gradecount (grade, number) AS SELECT grade, COUNT(*) FROM cu GROUP BY grade;
```

```
Administrator: XAMPP for Windows - mysql -u root -p

MariaDB [MCA]> CREATE VIEW gradecount (grade, number) AS SELECT grade, COUNT(*) FROM
customer GROUP BY grade;
Query OK, 0 rows affected (0.132 sec)

MariaDB [MCA]> SELECT * FROM GRADECOUNT;
+-----+-----+
| grade | number |
+-----+-----+
| 100   | 2      |
| 200   | 3      |
| 300   | 3      |
+-----+-----+
3 rows in set (0.045 sec)

MariaDB [MCA]>
```

e) Create a view to keeping track the number of customers ordering, number of salesmen attached, average amount of orders and the total amount of orders in a day.

```
CREATE VIEW SumPerDay AS SELECT ord_date, COUNT(DISTINCT c_id), AVG(purchase_amt),
SUM(purchase_amt) FROM orders GROUP BY ord_date;
```

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE VIEW SumPerDay AS SELECT ord_date, COUNT(DISTINCT c_id), AVG(purchase_amt), SUM(purchase_amt) FROM orders GROUP BY ord_date;
Query OK, 0 rows affected (0.822 sec)

MariaDB [MCA]> select * from sumperday;
+-----+-----+-----+-----+
| ord_date | COUNT(DISTINCT c_id) | AVG(purchase_amt) | SUM(purchase_amt) |
+-----+-----+-----+-----+
| 2012-04-25 | 1 | 3045.600098 | 3045.60 |
| 2012-06-27 | 1 | 250.449997 | 250.45 |
| 2012-07-27 | 1 | 2400.600098 | 2400.60 |
| 2012-08-17 | 2 | 92.895000 | 185.79 |
| 2012-09-10 | 3 | 2326.383331 | 6979.15 |
| 2012-10-05 | 2 | 107.880001 | 215.76 |
| 2012-10-10 | 2 | 2231.899963 | 4463.80 |
+-----+-----+-----+-----+
7 rows in set (0.243 sec)

MariaDB [MCA]> _
```

f) Create a view that shows for each order the salesman and customer by name.

```
CREATE VIEW ORDERSBYNAME AS SELECT o_no, purchase_amt, a.s_id, name, c_n FROM orders a,
customer b, salesman c WHERE a.c_id = b.c_id AND a.s_id = c.s_id;
```

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE VIEW ORDERSBYNAME AS SELECT o_no, purchase_amt, a.s_id, name, c_name FROM orders a, customer b, salesman c WHERE a.c_id = b.c_id AND a.s_id = c.s_id;
Query OK, 0 rows affected (0.140 sec)

MariaDB [MCA]> select * from ordersbyname;
+-----+-----+-----+-----+-----+
| o_no | purchase_amt | s_id | name | c_name |
+-----+-----+-----+-----+-----+
| 70001 | 150.50 | 5002 | Nail Knite | Graham Zusi |
| 70002 | 65.26 | 5001 | James Hoog | Nick Rimando |
| 70003 | 2480.40 | 5003 | Lauson Hen | Geoff Cameron |
| 70004 | 110.50 | 5003 | Lauson Hen | Geoff Cameron |
| 70005 | 2400.60 | 5001 | James Hoog | Brad Davis |
| 70007 | 948.50 | 5002 | Nail Knite | Graham Zusi |
| 70008 | 5760.00 | 5001 | James Hoog | Nick Rimando |
| 70009 | 270.65 | 5005 | Pit Alex | Brad Guzan |
| 70010 | 1983.40 | 5006 | Mc Lyon | Fabian Johnson |
| 70011 | 75.29 | 5007 | Paul Adam | Jozy Altidor |
| 70012 | 250.45 | 5002 | Nail Knite | Julian Green |
| 70013 | 3045.60 | 5001 | James Hoog | Nick Rimando |
+-----+-----+-----+-----+-----+
12 rows in set (0.148 sec)

MariaDB [MCA]> _
```


g) Create a view that finds the salesman who has the customer with the highest order of a day.

```
CREATE VIEW salesmanofday AS SELECT b.ord_date, a.s_id, a.name FROM sale a, orders b
WHERE a.s_id = b.s_id AND b.purchase_amt = (SELECT MAX(purchase_amt) FROM orders c
WHERE c.ord_date = b.ord_date);
```

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE VIEW salesmanofday AS SELECT b.ord_date, a.s_id, a.name FROM sa
lesman a, orders b WHERE a.s_id = b.s_id AND b.purchase_amt = (SELECT MAX(purchase_am
t) FROM orders c WHERE c.ord_date = b.ord_date);
Query OK, 0 rows affected (0.082 sec)

MariaDB [MCA]> select * from salesmanofday;
+-----+-----+-----+
| ord_date | s_id | name      |
+-----+-----+-----+
| 2012-10-05 | 5002 | Nail Knite |
| 2012-10-10 | 5003 | Lauson Hen |
| 2012-08-17 | 5003 | Lauson Hen |
| 2012-07-27 | 5001 | James Hoog |
| 2012-09-10 | 5001 | James Hoog |
| 2012-06-27 | 5002 | Nail Knite |
| 2012-04-25 | 5001 | James Hoog |
+-----+-----+-----+
7 rows in set (0.141 sec)

MariaDB [MCA]> _
```

h) Create a view that finds the salesman who has the customer with the highest order at least 3 times on a day.

```
CREATE VIEW saleswithmaxorder AS SELECT DISTINCT s_id, name FROM salesma a WHERE 3 <=
(SELECT COUNT(*) FROM salesmanofday b WHERE a.s_id = b.s_id
```

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE VIEW saleswithmaxorder AS SELECT DISTINCT s_id, name FROM sales
manofday a WHERE 3 <= (SELECT COUNT(*) FROM salesmanofday b WHERE a.s_id = b.s_id);
Query OK, 0 rows affected (0.089 sec)

MariaDB [MCA]> SELECT * FROM SALESWITHMAXORDER;
+-----+-----+
| s_id | name      |
+-----+-----+
| 5001 | James Hoog |
+-----+-----+
1 row in set (0.047 sec)

MariaDB [MCA]>
```

i) Create a view that shows all of the customers who have the highest grade.

```
CREATE VIEW highgrade AS SELECT * FROM customer WHERE grade=(SELECT MAX(
```


FROM customer);

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE VIEW highgrade AS SELECT * FROM customer WHERE grade=(SELECT MAX(grade) FROM customer);
Query OK, 0 rows affected (0.108 sec)

MariaDB [MCA]> select * from highgrade;
+-----+-----+-----+-----+-----+
| C_ID | C_NAME      | CITY   | GRADE | S_ID |
+-----+-----+-----+-----+-----+
| 3001 | Brad Guzan   | London | 300   | 5005 |
| 3004 | Fabian Johnson | Paris  | 300   | 5006 |
| 3008 | Julian Green | London | 300   | 5002 |
+-----+-----+-----+-----+-----+
3 rows in set (0.052 sec)

MariaDB [MCA]>
```

j) Create a view that shows the number of the salesman in each city.

CREATE VIEW NumSalesmanPerCity AS SELECT city, COUNT(DISTINCT s_id) FROM salesman GROUP

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE VIEW NumSalesmanPerCity AS SELECT city, COUNT(DISTINCT s_id) FROM salesman GROUP BY city;
Query OK, 0 rows affected (0.065 sec)

MariaDB [MCA]> select numsalesmanpercity;
ERROR 1054 (42S22): Unknown column 'numsalesmanpercity' in 'field list'
MariaDB [MCA]> select * from numsalesmanpercity;
+-----+-----+
| city   | COUNT(DISTINCT s_id) |
+-----+-----+
| London | 1 |
| New York | 1 |
| Paris  | 2 |
| Rome   | 1 |
| San Jose | 1 |
+-----+-----+
5 rows in set (0.044 sec)

MariaDB [MCA]>
```

k) Create a view that shows the average and total orders for each salesman after his or her name. (Assume all names are unique)

CREATE VIEW norders AS SELECT name, AVG(purchase_amt), SUM(purchase_amt) salesman, FROM orders WHERE salesman.s_id = orders.s_id GROUP BY name;

```
Administrator: XAMPP for Windows - mysql -u root -p

MariaDB [MCA]> CREATE VIEW norders AS SELECT name, AVG(purchase_amt), SUM(purchase_amt) FROM salesman, orders WHERE salesman.s_id = orders.s_id GROUP BY name;
Query OK, 0 rows affected (0.131 sec)

MariaDB [MCA]> select * from norders;
+-----+-----+-----+
| name      | AVG(purchase_amt) | SUM(purchase_amt) |
+-----+-----+-----+
| James Hoog | 2817.865049       | 11271.46          |
| Lauson Hen | 1295.449951       | 2590.90           |
| Mc Lyon    | 1983.400024       | 1983.40           |
| Nail Knite | 449.816666        | 1349.45           |
| Paul Adam  | 75.290001         | 75.29             |
| Pit Alex   | 270.649994        | 270.65            |
+-----+-----+-----+
6 rows in set (0.036 sec)

MariaDB [MCA]> _
```

l) Create a view that shows each salesman with more than one customers.

```
CREATE VIEW morecust AS SELECT * FROM salesman a WHERE 1 < (SELECT COUNT FROM
customer
```

*

```
Administrator: XAMPP for Windows - mysql -u root -p

MariaDB [MCA]> CREATE VIEW morecust AS SELECT * FROM salesman a WHERE 1 < (SELECT COUNT(*) FROM customer b WHERE a.s_id = b.s_id);
Query OK, 0 rows affected (0.085 sec)

MariaDB [MCA]> select * from morecust;
+-----+-----+-----+-----+
| S_ID | NAME      | CITY      | COMMISSION |
+-----+-----+-----+-----+
| 5001 | James Hoog | New York  | 0.15       |
| 5002 | Nail Knite | Paris     | 0.13       |
+-----+-----+-----+-----+
2 rows in set (0.001 sec)

MariaDB [MCA]> _
```

m) Create a view that shows all matches of customers with salesman such that at least one customer in the city of customer served by a salesman in the city of the salesman.

```
CREATE VIEW citymatch(custcity, salescity) AS SELECT DISTINCT a.city, b. FROM customer
a, salesman b WHERE a.s_id = b.s_id;
```

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE VIEW citymatch(custcity, salescity) AS SELECT DISTINCT a.city,
b.city FROM customer a, salesman b WHERE a.s_id = b.s_id;
Query OK, 0 rows affected (0.086 sec)

MariaDB [MCA]> select * from citymatch;
+-----+-----+
| custcity | salescity |
+-----+-----+
| London   | London    |
| New York | New York  |
| Moscow   | Rome      |
| Paris    | Paris     |
| California | Paris    |
| London   | Paris     |
| Berlin   | San Jose  |
+-----+-----+
7 rows in set (0.001 sec)

MariaDB [MCA]>
```

n) Create a view that shows the number of orders in each day

```
CREATE VIEW dateord(ord_date, odcount) AS SELECT ord_date, COUNT(*) FROM orders
```

GRO

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE VIEW dateord(ord_date, odcount) AS SELECT ord_date, COUNT(*) FR
OM orders GROUP BY ord_date;
Query OK, 0 rows affected (0.076 sec)

MariaDB [MCA]> select * from dateord;
+-----+-----+
| ord_date | odcount |
+-----+-----+
| 2012-04-25 | 1 |
| 2012-06-27 | 1 |
| 2012-07-27 | 1 |
| 2012-08-17 | 2 |
| 2012-09-10 | 3 |
| 2012-10-05 | 2 |
| 2012-10-10 | 2 |
+-----+-----+
7 rows in set (0.001 sec)

MariaDB [MCA]>
```

o) Create a view that finds the salesmen who issued orders on October 10th, 2012.

```
CREATE VIEW salesmanonoc AS SELECT * FROM salesman WHERE s_id IN (SELECT FROM orders
WHERE ord_date = '2012-10-10');
```

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE VIEW salesmanonoct AS SELECT * FROM salesman WHERE s_id IN (SELECT s_id FROM orders WHERE ord_date = '2012-10-10');
Query OK, 0 rows affected (0.088 sec)

MariaDB [MCA]> select * from salesmanonoct;
+-----+-----+-----+-----+
| S_ID | NAME      | CITY    | COMMISSION |
+-----+-----+-----+-----+
| 5003 | Lauson Hen | San Jose | 0.12       |
| 5006 | Mc Lyon    | Paris   | 0.14       |
+-----+-----+-----+-----+
2 rows in set (0.072 sec)

MariaDB [MCA]> _
```

p) Create a view that finds the salesmen who issued orders on either August 17th, 2012 or October 10th, 2012.

```
CREATE VIEW sorder AS SELECT s_id, o_no, c_id FROM orders WHERE ord_date IN('2012-08-17', '2012-10-10');
```

```
Administrator: XAMPP for Windows - mysql -u root -p
MariaDB [MCA]> CREATE VIEW sorder AS SELECT s_id, o_no, c_id FROM orders WHERE ord_date IN('2012-08-17', '2012-10-10');
Query OK, 0 rows affected (0.093 sec)

MariaDB [MCA]> select * from sorder;
+-----+-----+-----+
| s_id | o_no | c_id |
+-----+-----+-----+
| 5003 | 70003 | 3009 |
| 5003 | 70004 | 3009 |
| 5006 | 70010 | 3004 |
| 5007 | 70011 | 3003 |
+-----+-----+-----+
4 rows in set (0.001 sec)

MariaDB [MCA]> _
```