2. Consider following Relation:
Companies (comp_id, name, cost, year)
C001 ONGC 2000 2010
C002 HPCL 2500 2012
C005 IOCL 1000 2014
C006 BHEL 3000 2015
Orders (comp_id, domain, quantity)
C001 Oil 109
C002 Gas 121
C005 Telecom 115

Create above tables with appropriate constraints execute the following query:

1. Find names, costs, domains and quantities for companies using inner join.

```
mysql> select Companies.name, Companies.cost, Orders.domain, Orders.quantity from
Companies INNER JOIN Orders ON Companies.comp_id = Orders.comp_id;
+------+------+---------+----------+
| name | cost | domain  | quantity |
+------+------+---------+----------+
| ONGC | 2000 | Oil     |      109 |
| HPCL | 2500 | Gas     |      121 |
| IOCL | 1000 | Telecom |      115 |
+------+------+---------+----------+
3 rows in set (0.00 sec)
```

2. Find names, costs, domains and quantities for companies using left outer join.

```
mysql> select Companies.name, Companies.cost,Orders.domain,Orders.quantity from
Companies left outer join Orders on Companies.comp_id = Orders.comp_id;
+------+------+---------+----------+
| name | cost | domain  | quantity |
+------+------+---------+----------+
| ONGC | 2000 | Oil     |      109 |
| HPCL | 2500 | Gas     |      121 |
| IOCL | 1000 | Telecom |      115 |
| BHEL | 3000 | NULL    |     NULL |
+------+------+---------+----------+
4 rows in set (0.05 sec)
```

3. Find names, costs, domains and quantities for companies using right outer join.

```
mysql> select Companies.name, Companies.cost,Orders.domain,Orders.quantity from
Companies right outer join Orders on Companies.comp_id = Orders.comp_id;
+------+------+---------+----------+
| name | cost | domain  | quantity |
+------+------+---------+----------+
| ONGC | 2000 | Oil     |      109 |
| HPCL | 2500 | Gas     |      121 |
| IOCL | 1000 | Telecom |      115 |
+------+------+---------+----------+
3 rows in set (0.00 sec)
```

4. Find names, costs, domains and quantities for companies using Union operator.

```
mysql> select Companies.name,Companies.cost,Orders.domain,Orders.quantity from
Companies left join Orders on Companies.comp_id = Orders.comp_id
    -> UNION
    -> select Companies.name,Companies.cost,Orders.domain,Orders.quantity from
Companies right join Orders on Companies.comp_id = Orders.comp_id;
+------+------+---------+----------+
| name | cost | domain  | quantity |
+------+------+---------+----------+
| ONGC | 2000 | Oil     |      109 |
| HPCL | 2500 | Gas     |      121 |
| IOCL | 1000 | Telecom |      115 |
| BHEL | 3000 | NULL    |     NULL |
+------+------+---------+----------+
4 rows in set (0.00 sec)
```

5. Create View View1 by selecting both tables to show company name and quantities.

```
mysql> create view View4 as select Companies.name,Orders.quantity from Companies
left join Orders on Companies.comp_id = Orders.comp_id
```

```
    -> UNION
    -> select Companies.name,Orders.quantity from Companies right join Orders on
Companies.comp_id = Orders.comp_id;
Query OK, 0 rows affected (0.02 sec)

mysql> select * from View4;
+------+----------+
| name | quantity |
+------+----------+
| ONGC |      109 |
| HPCL |      121 |
| IOCL |      115 |
| BHEL |     NULL |
+------+----------+
4 rows in set (0.00 sec)
```

6. Create View2 on Companies table by selecting any two columns and perform insert update delete operations.

```
mysql> create or replace view View5 as select comp_id,name from Companies;
Query OK, 0 rows affected (0.04 sec)

mysql> select * from View5;
+---------+------+
| comp_id | name |
+---------+------+
| C001    | ONGC |
| C002    | HPCL |
| C005    | IOCL |
| C006    | BHEL |
+---------+------+
4 rows in set (0.00 sec)

mysql> insert into View5 values("C007","DRDO");
Query OK, 1 row affected (0.04 sec)

mysql> insert into View5 values("C008","SRD");
Query OK, 1 row affected (0.04 sec)

mysql> select * from View5;
+---------+------+
| comp_id | name |
+---------+------+
| C001    | ONGC |
| C002    | HPCL |
| C005    | IOCL |
| C006    | BHEL |
| C007    | DRDO |
| C008    | SRD  |
+---------+------+
6 rows in set (0.00 sec)

mysql> update View5 set name="SSD" where comp_id="C007";
Query OK, 1 row affected (0.05 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from View5;
+---------+------+
| comp_id | name |
+---------+------+
| C001    | ONGC |
| C002    | HPCL |
| C005    | IOCL |
| C006    | BHEL |
| C007    | SSD  |
| C008    | SRD  |
+---------+------+
6 rows in set (0.00 sec)

mysql> delete from View5 where comp_id="C005";
```

```
Query OK, 1 row affected (0.03 sec)

mysql> delete from View5 where comp_id="C006";
Query OK, 1 row affected (0.04 sec)

mysql> select * from View5;
+---------+------+
| comp_id | name |
+---------+------+
| C001    | ONGC |
| C002    | HPCL |
| C007    | SSD  |
| C008    | SRD  |
+---------+------+
4 rows in set (0.00 sec)

7. Display content of View1, View2.
mysql> select * from View4;
+------+----------+
| name | quantity |
+------+----------+
| ONGC |      109 |
| HPCL |      121 |
| IOCL |      115 |
| BHEL |     NULL |
+------+----------+
4 rows in set (0.00 sec)

mysql> select * from View5;
+---------+------+
| comp_id | name |
+---------+------+
| C001    | ONGC |
| C002    | HPCL |
| C007    | SSD  |
| C008    | SRD  |
+---------+------+
4 rows in set (0.00 sec)
```