Group A - 3
1. Create Database Book

```
mysql>create database Book;
Query OK, 1 row affected (0.04 sec)

mysql> use Book;
Database changed
```

2.Create Tables Book and Book_Author

```
mysql> create table Book(Book_ISBN varchar(20) primary key,Title varchar(20) not
null,Publisher varchar(30),Price int(10),Date_Of_publication date);
Query OK, 0 rows affected (0.39 sec)

mysql> desc Book;
+---------------------+-------------+------+-----+---------+-------+
| Field               | Type        | Null | Key | Default | Extra |
+---------------------+-------------+------+-----+---------+-------+
| Book_ISBN           | varchar(20) | NO   | PRI | NULL    |       |
| Title               | varchar(20) | NO   |     | NULL    |       |
| Publisher           | varchar(30) | YES  |     | NULL    |       |
| Price               | int(10)     | YES  |     | NULL    |       |
| Date_Of_publication | date        | YES  |     | NULL    |       |
+---------------------+-------------+------+-----+---------+-------+
5 rows in set (0.00 sec)

mysql> create table Book_Author(Book_ISBN varchar(20),Author_Name
varchar(30),Author_City varchar(30) default "Pune",Phone varchar(10)
unique,foreign key fk(Book_ISBN) references Book(Book_ISBN));
Query OK, 0 rows affected (1.17 sec)

mysql> desc Book_Author;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| Book_ISBN   | varchar(20) | YES  | MUL | NULL    |       |
| Author_Name | varchar(30) | YES  |     | NULL    |       |
| Author_City | varchar(30) | YES  |     | Pune    |       |
| Phone       | varchar(10) | YES  | UNI | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
4 rows in set (0.05 sec)
```

3.Insert Data into Tables

```
mysql> insert into Book value("ISBN-001","Big Data","Tata
McGrawHill",654,"2004-07-10");
Query OK, 1 row affected (0.17 sec)

mysql> insert into Book value("ISBN-002","MySQL Database","Tata
McGrawHill",1230,"2008-02-20");
Query OK, 1 row affected (0.11 sec)

mysql> insert into Book value("ISBN-003","Data
Mining","PenticeHall",450,"2002-05-01");
Query OK, 1 row affected (0.08 sec)
```

```
mysql> insert into Book
value("ISBN-004","Hadoop","PenticeHall",750,"2009-12-22");
Query OK, 1 row affected (0.09 sec)

mysql> insert into Book value("ISBN-005","R-Programming","Pearson
Asia",250,"1999-03-20");
Query OK, 1 row affected (0.08 sec)


mysql> insert into Book_Author values("ISBN-001","Kevin
Loney","Mumbai",23456781);
Query OK, 1 row affected (0.08 sec)

mysql> insert into Book_Author values("ISBN-003","V.
Rajaraman","Dehli",23456782);
Query OK, 1 row affected (0.08 sec)

mysql> insert into Book_Author values("ISBN-004","Bansal
Veena","Kolkata",45672348);
Query OK, 1 row affected (0.04 sec)

mysql> insert into Book_Author values("ISBN-005","James
F.Kurose","Chennai",45672350);
Query OK, 1 row affected (0.08 sec)

mysql> select *from Book_author;
+-----------+---------------+-------------+----------+
| Book_ISBN | Author_Name   | Author_City | Phone    |
+-----------+---------------+-------------+----------+
| ISBN-001  | Kevin Loney   | Mumbai      | 23456781 |
| ISBN-003  | V. Rajaraman  | Dehli       | 23456782 |
| ISBN-004  | Bansal Veena  | Kolkata     | 45672348 |
| ISBN-005  | James F.Kurose | Chennai    | 45672350 |
+-----------+---------------+-------------+----------+
4 rows in set (0.00 sec)
```

4.Adding Column to the Table

```
mysql> alter table Book add column Address varchar(60);
Query OK, 0 rows affected (1.00 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc Book;
+--------------------+-------------+------+-----+---------+-------+
| Field              | Type        | Null | Key | Default | Extra |
+--------------------+-------------+------+-----+---------+-------+
| Book_ISBN          | varchar(20) | NO   | PRI | NULL    |       |
| Title              | varchar(20) | NO   |     | NULL    |       |
| Publisher          | varchar(30) | YES  |     | NULL    |       |
| Price              | int(10)     | YES  |     | NULL    |       |
| Date_Of_publication | date       | YES  |     | NULL    |       |
| Address            | varchar(60) | YES  |     | NULL    |       |
+--------------------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)
```

5.update Record in Book

```
mysql> select *from Book ;
+-----------+------------------+----------------+-------+------------------
---+---------+
| Book_ISBN | Title            | Publisher      | Price | Date_Of_publication
| Address |
+-----------+------------------+----------------+-------+------------------
---+---------+
| ISBN-001  | Big Data         | Tata McGrawHill |   654 | 2004-07-10        |
NULL    |
| ISBN-002  | MySQL Database   | Tata McGrawHill |  1230 | 2008-02-20        |
NULL    |
| ISBN-003  | Data Mining      | PenticeHall    |   450 | 2002-05-01
| NULL    |
| ISBN-004  | Hadoop           | PenticeHall    |   750 | 2009-12-22
| NULL    |
| ISBN-005  | R-Programming    | Pearson Asia   |   250 | 1999-03-20
| NULL    |
| ISBN-006  | Database Concepts | Pearson Asia    |  NULL | NULL              |
NULL    |
+-----------+------------------+----------------+-------+------------------
---+---------+
6 rows in set (0.00 sec)


mysql> update Book set Price=780,Date_of_publication="1998-07-21" where
Book_ISBN="ISBN-006";
Query OK, 1 row affected (0.06 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select *from Book ;
+-----------+------------------+----------------+-------+------------------
---+---------+
| Book_ISBN | Title            | Publisher      | Price | Date_Of_publication
| Address |
+-----------+------------------+----------------+-------+------------------
---+---------+
| ISBN-001  | Big Data         | Tata McGrawHill |   654 | 2004-07-10        |
NULL    |
| ISBN-002  | MySQL Database   | Tata McGrawHill |  1230 | 2008-02-20        |
NULL    |
| ISBN-003  | Data Mining      | PenticeHall    |   450 | 2002-05-01
| NULL    |
| ISBN-004  | Hadoop           | PenticeHall    |   750 | 2009-12-22
| NULL    |
| ISBN-005  | R-Programming    | Pearson Asia   |   250 | 1999-03-20
| NULL    |
| ISBN-006  | Database Concepts | Pearson Asia    |   780 | 1998-07-21        |
NULL    |
+-----------+------------------+----------------+-------+------------------
---+---------+
6 rows in set (0.00 sec)

mysql>
```

6.Select Book by Title

```
mysql> select *from Book where Title="Database Concepts";
```

```
+-----------+------------------+--------------+-------+--------------------+---------+
| Book_ISBN | Title            | Publisher    | Price | Date_Of_publication | Address |
+-----------+------------------+--------------+-------+--------------------+---------+
| ISBN-006  | Database Concepts | Pearson Asia |  NULL | NULL               | NULL    |
+-----------+------------------+--------------+-------+--------------------+---------+
1 row in set (0.00 sec)

mysql> select *from Book where Title="Data Mining";
+-----------+------------+-------------+-------+--------------------+---------+
| Book_ISBN | Title      | Publisher   | Price | Date_Of_publication | Address |
+-----------+------------+-------------+-------+--------------------+---------+
| ISBN-003  | Data Mining | PenticeHall |   450 | 2002-05-01         | NULL    |
+-----------+------------+-------------+-------+--------------------+---------+
1 row in set (0.00 sec)
```

7.Use Between Operator

```
mysql> select *from Book where Price between 600 and 800;
+-----------+----------+----------------+-------+--------------------+---------+
| Book_ISBN | Title    | Publisher      | Price | Date_Of_publication | Address |
+-----------+----------+----------------+-------+--------------------+---------+
| ISBN-001  | Big Data | Tata McGrawHill |   654 | 2004-07-10         | NULL    |
| ISBN-004  | Hadoop   | PenticeHall    |   750 | 2009-12-22         | NULL    |
+-----------+----------+----------------+-------+--------------------+---------+
2 rows in set (0.04 sec)
```

8.Display Average Price

```
mysql> select avg(Price),Title from Book where Date_of_Publication between "2000-01-01" and "2009-01-01";
+------------+----------+
| avg(Price) | Title    |
+------------+----------+
|   778.0000 | Big Data |
+------------+----------+
1 row in set (0.06 sec)
```

9.Select Book having Minimun Price

```
mysql> select Author_Name from Book_Author where Book_ISBN=(select Book_ISBN from Book where Price=(select min(Price) from Book));
+----------------+
| Author_Name    |
```

```
+---------------+
| James F.Kurose |
+---------------+
1 row in set (0.00 sec)
```

10.Display name of Publisher as per no of books published by them in ascending order

```
mysql> select Publisher from Book order by Title asc;
+----------------+
| Publisher      |
+----------------+
| Tata McGrawHill |
| PenticeHall    |
| Pearson Asia   |
| PenticeHall    |
| Tata McGrawHill |
| Pearson Asia   |
+----------------+
6 rows in set (0.04 sec)
```

11.Count Number of books between specific years

```
mysql> select count(Publisher) from Book where Date_of_publication between
"2002-01-01" and curdate();
+------------------+
| count(Publisher) |
+------------------+
|                4 |
+------------------+
1 row in set (0.00 sec)
```

12.Union of Two tables

```
mysql> select Book_ISBN,Title from Book UNION select Book_ISBN,Author_Name from
Book_Author;
+-----------+-------------------+
| Book_ISBN | Title             |
+-----------+-------------------+
| ISBN-001  | Big Data          |
| ISBN-002  | MySQL Database    |
| ISBN-003  | Data Mining       |
| ISBN-004  | Hadoop            |
| ISBN-005  | R-Programming     |
| ISBN-006  | Database Concepts |
| ISBN-001  | Kevin Loney       |
| ISBN-003  | V. Rajaraman      |
| ISBN-004  | Bansal Veena      |
| ISBN-005  | James F.Kurose    |
+-----------+-------------------+
10 rows in set (0.04 sec)
```