# Group A - 2

# 1. Create Database Book

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

# 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;

Database changed

| +                                                                       | +                                                      | +     | +   |                              | ++    |
|-------------------------------------------------------------------------|--------------------------------------------------------|-------|-----|------------------------------|-------|
| Field                                                                   | ·                                                      | Null  | Key | Default                      | Extra |
| Book_ISBN<br>  Title<br>  Publisher<br>  Price<br>  Date_Of_publication | <pre>varchar(20) varchar(20) varchar(30) int(10)</pre> | NO NO | •   | NULL<br>NULL<br>NULL<br>NULL | <br>  |

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                                   | +<br>  Type<br>+                    | Null            | Кеу                    | Default              | Extra |
|-----------------------------------------|-------------------------------------|-----------------|------------------------|----------------------|-------|
| Book_ISBN Author_Name Author_City Phone | varchar(20) varchar(30) varchar(30) | YES YES YES YES | MUL<br> <br> <br>  UNI | NULL<br>NULL<br>Pune | <br>  |

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                                                                                | +<br>  Type<br>                             | Null | Key                           | Default                  | Extra |
|--------------------------------------------------------------------------------------|---------------------------------------------|------|-------------------------------|--------------------------|-------|
| Book_ISBN<br>  Title<br>  Publisher<br>  Price<br>  Date_Of_publication<br>  Address | varchar(20) varchar(20) varchar(30) int(10) |      | PRI  <br> <br> <br> <br> <br> | NULL NULL NULL NULL NULL |       |

<sup>6</sup> rows in set (0.00 sec)

#### 5. Create View from Table

mysql> create view view1 as select Book\_ISBN,Title,Publisher from Book;
Query OK, 0 rows affected (0.09 sec)

mysql> create view view2 as select Title, Author\_Name, Publisher from Book, Book\_Author; Query OK, 0 rows affected (0.06 sec)

mysql> select \*from view1;

| Book_ISBN   Title                                                                                                          | т. |                                  |   |                                         |             |                                               |  |
|----------------------------------------------------------------------------------------------------------------------------|----|----------------------------------|---|-----------------------------------------|-------------|-----------------------------------------------|--|
| ISBN-002   MySQL Database   Tata McGrawHill<br>  ISBN-003   Data Mining   PenticeHall<br>  ISBN-004   Hadoop   PenticeHall |    |                                  | ' |                                         | <br> <br> - | Publisher                                     |  |
| ++                                                                                                                         |    | ISBN-002<br>ISBN-003<br>ISBN-004 | T | MySQL Database<br>Data Mining<br>Hadoop | <br>        | Tata McGrawHill<br>PenticeHall<br>PenticeHall |  |

5 rows in set (0.10 sec)

mysql> select \*from view2;

| Title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Author_Name                                                                                                                                                                                                                                                                                                                   | Publisher                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hence the state of | Kevin Loney V. Rajaraman Bansal Veena James F.Kurose | Tata McGrawHill   PenticeHall   Pearson Asia   Pearson Asia   Pearson Asia |

20 rows in set (0.03 sec)

mysql> create view view3 as select \*from Book where
Date\_of\_Publication>"2014-01-01";
Query OK, 0 rows affected (0.10 sec)

mysql> select \*from view3; Empty set (0.05 sec)

# 6. Drop View

mysql> drop view view3;
Query OK, 0 rows affected (0.00 sec)

```
mysql> select *from view3;
ERROR 1146 (42S02): Table 'book.view3' doesn't exist
mysql> select *from view2;
+----+
            | Author Name | Publisher |
+----+
| Big Data | James F.Kurose | Tata McGrawHill |
| MySQL Database | Kevin Loney | Tata McGrawHill |
| MySQL Database | V. Rajaraman | Tata McGrawHill |
| MySQL Database | Bansal Veena | Tata McGrawHill |
| MySQL Database | James F.Kurose | Tata McGrawHill |
| Data Mining | Kevin Loney | PenticeHall
| Data Mining | V. Rajaraman | PenticeHall
| Data Mining | Bansal Veena | PenticeHall
| Data Mining | James F.Kurose | PenticeHall
| Hadoop
            | Kevin Loney | PenticeHall
            | V. Rajaraman | PenticeHall
| Hadoop
            | Bansal Veena | PenticeHall
| Hadoop
        | James F.Kurose | PenticeHall
| Hadoop
| R-Programming | Kevin Loney | Pearson Asia
| R-Programming | V. Rajaraman | Pearson Asia
| R-Programming | Bansal Veena | Pearson Asia
| R-Programming | James F.Kurose | Pearson Asia
+----+
20 rows in set (0.00 sec)
mysql> drop view view2;
Query OK, 0 rows affected (0.00 sec)
mysql> select *from view2;
ERROR 1146 (42S02): Table 'book.view2' doesn't exist
mysql>
```

# 7. Display View

mysql> select \*from view1;

| Book_ISBN   Title                                                                                                                                                         | +                                                  | + |                                                     | +-     |                                               | - +         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|---|-----------------------------------------------------|--------|-----------------------------------------------|-------------|
| ISBN-001   Big Data   Tata McGrawHill  <br>  ISBN-002   MySQL Database   Tata McGrawHill  <br>  ISBN-003   Data Mining   PenticeHall<br>  ISBN-004   Hadoop   PenticeHall | · —                                                |   |                                                     | <br> - | Publisher                                     |             |
| +                                                                                                                                                                         | ISBN-001<br>  ISBN-002<br>  ISBN-003<br>  ISBN-004 |   | Big Data<br>MySQL Database<br>Data Mining<br>Hadoop |        | Tata McGrawHill<br>PenticeHall<br>PenticeHall | -       - + |

5 rows in set (0.00 sec)

# 8. Insert into View

mysql> insert into view1 values("ISBN-006","Database System","Pearson Asia");
Query OK, 1 row affected (0.05 sec)

```
mysql> select *from view1;
+----+
| Book ISBN | Title | Publisher
+----+
| ISBN-001 | Big Data | Tata McGrawHill |
| ISBN-002 | MySQL Database | Tata McGrawHill |
| ISBN-003 | Data Mining | PenticeHall
| ISBN-004 | Hadoop
                   | PenticeHall
| ISBN-005 | R-Programming | Pearson Asia
| ISBN-006 | Database System | Pearson Asia
+----+
6 rows in set (0.00 sec)
9. Update View
mysql> UPDATE view1 SET Title="Database Concepts" where Book ISBN="ISBN-006";
Query OK, 1 row affected (0.18 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> select *from view1;
+----+
| Book ISBN | Title
                     | Publisher |
+----+
| ISBN-001 | Big Data | Tata McGrawHill |
| ISBN-002 | MySQL Database | Tata McGrawHill |
| ISBN-003 | Data Mining | PenticeHall |
| ISBN-004 | Hadoop
                     | PenticeHall
| ISBN-005 | R-Programming | Pearson Asia
| ISBN-006 | Database Concepts | Pearson Asia
+-----
6 rows in set (0.00 sec)
10. Create Index
mysql> create index index1 on Book(Book ISBN);
Query OK, 0 rows affected (0.36 sec)
Records: 0 Duplicates: 0 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
                     | ISBN-003 | Data Mining
| NULL |
                     | ISBN-004 | Hadoop
| NULL |
| ISBN-005 | R-Programming | Pearson Asia | 250 | 1999-03-20
```

| ISBN-006 | Database Concepts | Pearson Asia | NULL | NULL

NULL |

```
+-----+
6 rows in set (0.00 sec)

mysql> create index index2 on Book_Author(Book_ISBN,Author_Name);
Query OK, 0 rows affected (0.54 sec)
Records: 0 Duplicates: 0 Warnings: 0
```