

## Group A - 4

### 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.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           | 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    |
+-----+-----+-----+
5 rows in set (0.10 sec)
```

```
mysql> select *from view2;
```

```
+-----+-----+-----+
| Title           | Author_Name     | Publisher       |
+-----+-----+-----+
| Big Data        | Kevin Loney     | Tata McGrawHill |
| Big Data        | V. Rajaraman    | Tata McGrawHill |
| Big Data        | Bansal Veena    | Tata McGrawHill |
| 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     |
| Hadoop          | V. Rajaraman    | PenticeHall     |
| Hadoop          | Bansal Veena    | PenticeHall     |
| Hadoop          | James F.Kurose  | PenticeHall     |
| 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 (0.03 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;
```

```
+-----+-----+-----+
| Title          | Author_Name    | Publisher      |
+-----+-----+-----+
| Big Data       | Kevin Loney    | Tata McGrawHill |
| Big Data       | V. Rajaraman   | Tata McGrawHill |
| Big Data       | Bansal Veena   | Tata McGrawHill |
| 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     |
| Hadoop         | V. Rajaraman   | PenticeHall     |
| Hadoop         | Bansal Veena   | PenticeHall     |
| Hadoop         | James F.Kurose | PenticeHall     |
| 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          | 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    |
+-----+-----+-----+
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.Select with SubQuery

```
mysql> select Book_ISBN from Book where Title=(select Title from Book where
Price=(select min(price) from Book));
```

Book_ISBN
ISBN-005

1 row in set (0.00 sec)

## 11. Inner Join Between Tables

```
mysql> select Title from Book INNER JOIN Book_Author On
Book.Book_ISBN=Book_Author.Book_ISBN;
```

Title
Big Data
Data Mining
Hadoop
R-Programming

4 rows in set (0.02 sec)

## 12. LEFT OUTER Join (Selecting all records from table Book)

```
mysql> select Title from Book LEFT OUTER JOIN Book_Author On  
Book.Book_ISBN=Book_Author.Book_ISBN;
```

```
+-----+  
| Title          |  
+-----+  
| Big Data       |  
| MySQL Database |  
| Data Mining    |  
| Hadoop         |  
| R-Programming  |  
| Database Concepts |  
+-----+  
6 rows in set (0.00 sec)
```

## 13. RIGHT OUTER Join (selecting all records from table Book\_Author)

```
mysql> select Title from Book RIGHT OUTER JOIN Book_Author On  
Book.Book_ISBN=Book_Author.Book_ISBN;
```

```
+-----+  
| Title          |  
+-----+  
| Big Data       |  
| Data Mining    |  
| Hadoop         |  
| R-Programming  |  
+-----+  
4 rows in set (0.00 sec)
```