

## Outputs of library database project

### Creating tables

```
mysql> DROP DATABASE IF EXISTS library;
Query OK, 9 rows affected (0.76 sec)

mysql> CREATE DATABASE library;
Query OK, 1 row affected (0.00 sec)

mysql>
mysql> USE library;
Database changed
mysql>
mysql> CREATE TABLE author
-> (
-> authorid          INT AUTO_INCREMENT,
-> authorname        VARCHAR(100),
->
-> PRIMARY KEY (authorid)
-> );
Query OK, 0 rows affected (0.16 sec)

mysql>
mysql> CREATE TABLE book
-> (
-> bookid            INT AUTO_INCREMENT,
-> title             VARCHAR(100),
-> edition           INT,
-> authorid          INT,
->
-> PRIMARY KEY (bookid),
-> FOREIGN KEY (authorid) REFERENCES author(authorid)
-> );
Query OK, 0 rows affected (0.09 sec)

mysql>
mysql> CREATE TABLE publisher
-> (
-> publisherid       INT AUTO_INCREMENT,
-> bookid            INT,
-> publishername      VARCHAR(100),
-> publisherdate      DATETIME,
->
-> PRIMARY KEY (publisherid),
-> FOREIGN KEY (bookid) REFERENCES book(bookid)
-> );
Query OK, 0 rows affected (0.13 sec)

mysql>
mysql> CREATE TABLE bookcategory
-> (
-> bookid            INT AUTO_INCREMENT,
-> category          VARCHAR(100),
->
-> PRIMARY KEY (bookid),
-> FOREIGN KEY (bookid) REFERENCES book(bookid)
-> );
Query OK, 0 rows affected (0.09 sec)

mysql>
mysql> CREATE TABLE booklocation
-> (
```

```

mysql> CREATE TABLE booklocation
-> <
-> bookid          INT AUTO_INCREMENT,
-> place          VARCHAR(100),
->
-> PRIMARY KEY (bookid),
-> FOREIGN KEY (bookid) REFERENCES book(bookid)
-> >;
Query OK, 0 rows affected (0.08 sec)

mysql>
mysql> CREATE TABLE member
-> <
-> memberid        INT AUTO_INCREMENT,
-> membername      VARCHAR(100),
->
-> PRIMARY KEY (memberid)
-> >;
Query OK, 0 rows affected (0.13 sec)

mysql>
mysql>
mysql> CREATE TABLE issuedetails
-> <
-> memberid        INT,
-> bookid          INT,
-> issuedate       DATE,
-> returndate      DATE,
-> currenddate     TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
->
-> PRIMARY KEY (bookid),
-> FOREIGN KEY (bookid) REFERENCES book(bookid),
-> FOREIGN KEY (memberid) REFERENCES member(memberid)
-> >;
Query OK, 0 rows affected (0.14 sec)

mysql>
mysql> CREATE TABLE contact
-> <
-> memberid        INT,
-> contacttype     VARCHAR(100),
-> contactvalue    VARCHAR(100),
->
-> PRIMARY KEY (memberid),
-> FOREIGN KEY (memberid) REFERENCES member(memberid)
-> >;
Query OK, 0 rows affected (0.08 sec)

mysql>
mysql>
mysql> CREATE TABLE bookstatus
-> <
-> bookid          INT,
-> status          VARCHAR(100),
->
->
-> PRIMARY KEY (bookid),
-> FOREIGN KEY (bookid) REFERENCES book(bookid)
-> >;

```

## Inserting Tables

```
mysql> INSERT INTO bookcategory
-> (bookid,category)
-> VALUES
-> (1,'Art'),
-> (2,'Business'),
-> (3,'Chick Lit'),
-> (4,'Christian'),
-> (5,'Classics'),
-> (6,'Comics'),
-> (7,'Contemporary'),
-> (8,'Cookbooks'),
-> (9,'Fiction'),
-> (10,'History');
Query OK, 10 rows affected (0.03 sec)
Records: 10  Duplicates: 0  Warnings: 0

mysql>
mysql>
mysql>
mysql> INSERT INTO booklocation
-> (bookid,place)
-> VALUES
-> (1,'first rack first floor'),
-> (2,'second rack first floor'),
-> (3,'third rack first floor'),
-> (4,'fourth rack first floor'),
-> (5,'fifth rack first floor'),
-> (6,'first rack second floor'),
-> (7,'second rack second floor'),
-> (8,'third rack second floor'),
-> (9,'fourth rack second floor'),
-> (10,'fifth rack second floor');
Query OK, 10 rows affected (0.05 sec)
Records: 10  Duplicates: 0  Warnings: 0

mysql>
mysql>
mysql> INSERT INTO member
-> (memberid,membername)
-> VALUES
-> (1,'hasan'),
-> (2,'ali'),
-> (3,'mirza'),
-> (4,'mubeen'),
-> (5,'hiran'),
-> (6,'mujib'),
-> (7,'chanakya'),
-> (8,'guru'),
-> (9,'prudhvi'),
-> (10,'azar');
Query OK, 10 rows affected (0.05 sec)
Records: 10  Duplicates: 0  Warnings: 0

mysql>
mysql>
mysql> INSERT INTO issuedetails
-> (memberid,bookid,issuedate,returndate,currendate)
-> VALUES
-> (1,1,'2016-01-23','2016-05-20','2016-05-10'),
-> (2,2,'2016-02-27','2016-06-01','2016-05-10'),
```

```

-> (9,'prudhvi'),
-> (10,'azar');
Query OK, 10 rows affected (0.05 sec)
Records: 10 Duplicates: 0 Warnings: 0

mysql>
mysql>
mysql> INSERT INTO issueddetails
-> (memberid,bookid,issuedate,returndate,currendate)
-> VALUES
-> (1,1,'2016-01-23','2016-05-20','2016-05-10'),
-> (2,2,'2016-02-27','2016-06-01','2016-05-10'),
-> (3,3,'2016-03-12','2016-04-10','2016-05-10'),
-> (4,4,'2016-04-13','2016-07-19','2016-05-10'),
-> (5,5,'2016-05-05','2016-08-06','2016-05-10'),
-> (6,6,'2016-01-04','2016-05-19','2016-05-10'),
-> (7,7,'2016-02-21','2016-06-08','2016-05-10'),
-> (8,8,'2016-03-18','2016-07-14','2016-05-10'),
-> (9,9,'2016-04-02','2016-08-22','2016-05-10'),
-> (10,10,'2016-05-09','2016-09-11','2016-05-10');
Query OK, 10 rows affected (0.03 sec)
Records: 10 Duplicates: 0 Warnings: 0

mysql>
mysql>
mysql> INSERT INTO contact
-> (memberid,contacttype,contactvalue)
-> VALUES
-> (1,'phone','4756554459'),
-> (2,'emailid','hasanam93@gmail.com'),
-> (3,'phone','2036554459'),
-> (4,'emailid','kaffa@yahoo.com'),
-> (5,'emailid','hmirz2@unh.newhaven.edu'),
-> (6,'phone','2036554461'),
-> (7,'phone','2034054467'),
-> (8,'emailid','kali2@outlook.com'),
-> (9,'phone','4756554456'),
-> (10,'emailid','jaffa1@gmail.com');
Query OK, 10 rows affected (0.05 sec)
Records: 10 Duplicates: 0 Warnings: 0

mysql>
mysql>
mysql> INSERT INTO bookstatus
-> (bookid,status)
-> VALUES
-> (1,'available'),
-> (2,'not available'),
-> (3,'not available'),
-> (4,'available'),
-> (5,'not available'),
-> (6,'available'),
-> (7,'available'),
-> (8,'not available'),
-> (9,'available'),
-> (10,'not available');
Query OK, 10 rows affected (0.06 sec)
Records: 10 Duplicates: 0 Warnings: 0

mysql>

```

## Group By Tables

```
mysql> USE library;
Database changed
mysql>
mysql> SELECT      membername, COUNT(*)
-> FROM            member
-> GROUP BY membername;
```

membername	COUNT(*)
ali	1
azar	1
chanakya	1
guru	1
hasan	1
hiran	1
mirza	1
mubeen	1
mujib	1
prudhvi	1

10 rows in set (0.00 sec)

```
mysql>
mysql> SELECT      b.title,bc.category
-> FROM            book b,bookcategory bc
-> WHERE           b.bookid=bc.bookid
-> GROUP BY b.bookid;
```

title	category
On Writing: A Memoir of the craft	Art
Letter to a Young Poet	Business
Bird by Bird: Some Instruction on Writing and Life	Chick Lit
Being and Time	Christian
The Artists Way A Spiritual Path to Higher Creativity	Classics
Against the Flow The Arts, Postmodern Culture and Education	Comics
Writing Down the Bones:Freeing the Writer Within	Contemporary
The Age of Insight	Cookbooks
Steppenwolf	Fiction
The Elements of Style	History

10 rows in set (0.00 sec)

```
mysql>
mysql> SELECT      title,bookid
-> FROM            book
-> WHERE bookid>0
-> ORDER BY title asc;
```

title	bookid
Against the Flow The Arts, Postmodern Culture and Education	6
Being and Time	4
Bird by Bird: Some Instruction on Writing and Life	3
Letter to a Young Poet	2
On Writing: A Memoir of the craft	1
Steppenwolf	9
The Age of Insight	8
The Artists Way A Spiritual Path to Higher Creativity	5
The Elements of Style	10

## Joins in Tables

```
mysql>
mysql> USE library;
Database changed
mysql>
mysql> SELECT a.authorname,b.title
      -> FROM book b LEFT JOIN author a
      -> ON a.authorid = b.authorid;
```

authorname	title
stephen king	On Writing: A Memoir of the craft
rainer maria rilke	Letter to a Young Poet
anne lamott	Bird by Bird: Some Instruction on Writing and Life
martin heidegger	Being and Time
julia cameron	The Artists Way A Spiritual Path to Higher Creativity
peter abbs	Against the Flow The Arts, Postmodern Culture and Education
natalie goldberg	Writing Down the Bones:Freeing the Writer Within
eric R.kandel	The Age of Insight
hermann hesse	Steppenwolf
william strunk Jr.	The Elements of Style

```
10 rows in set (0.00 sec)

mysql>
mysql>
mysql> SELECT b.membername,c.contacttype,c.contactvalue
      -> FROM member b RIGHT JOIN contact c
      -> ON b.memberid = c.memberid;
```

membername	contacttype	contactvalue
hasan	phone	4756554459
ali	emailid	hasanam93@gmail.com
mirza	phone	2036554459
mubeen	emailid	kaffa@yahoo.com
hiran	emailid	hmirz2@unh.newhaven.edu
mujib	phone	2036554461
chanakya	phone	2034054467
guru	emailid	kali2@outlook.com
prudhvi	phone	4756554456
azar	emailid	jaffa1@gmail.com

```
10 rows in set (0.02 sec)

mysql>
```

## Sub Queries in Tables

```
mysql> USE library;
Database changed
mysql>
mysql> SELECT issue,current,retur
-> FROM (SELECT issuedate AS issue, currendate AS current, returndate AS ret
ur
-> FROM issuedetails) AS seedates
-> WHERE retur > current;
+-----+-----+-----+
| issue          | current          | retur          |
+-----+-----+-----+
| 2016-01-23     | 2016-05-10 00:00:00 | 2016-05-20     |
| 2016-02-27     | 2016-05-10 00:00:00 | 2016-06-01     |
| 2016-04-13     | 2016-05-10 00:00:00 | 2016-07-19     |
| 2016-05-05     | 2016-05-10 00:00:00 | 2016-08-06     |
| 2016-01-04     | 2016-05-10 00:00:00 | 2016-05-19     |
| 2016-02-21     | 2016-05-10 00:00:00 | 2016-06-08     |
| 2016-03-18     | 2016-05-10 00:00:00 | 2016-07-14     |
| 2016-04-02     | 2016-05-10 00:00:00 | 2016-08-22     |
| 2016-05-09     | 2016-05-10 00:00:00 | 2016-09-11     |
+-----+-----+-----+
9 rows in set (0.00 sec)

mysql>
mysql>
mysql> SELECT title,edition
-> FROM book
-> WHERE bookid IN (SELECT bookid
-> FROM publisher
-> WHERE bookid>=1);
+-----+-----+
| title                                     | edition |
+-----+-----+
| On Writing: A Memoir of the craft         | 3       |
| Letter to a Young Poet                   | 5       |
| Bird by Bird: Some Instruction on Writing and Life | 2       |
| Being and Time                           | 6       |
| The Artists Way A Spiritual Path to Higher Creativity | 1       |
| Against the Flow The Arts, Postmodern Culture and Education | 2       |
| Writing Down the Bones:Freeing the Writer Within | 5       |
| The Age of Insight                       | 4       |
| Steppenwolf                             | 2       |
| The Elements of Style                    | 5       |
+-----+-----+
10 rows in set (0.00 sec)

mysql>
```

## Update and Alter the table

```
mysql> USE library;
Database changed
mysql>
mysql> ALTER TABLE bookstatus
    -> RENAME TO bookisthere;
Query OK, 0 rows affected (0.05 sec)

mysql>
mysql>
mysql> ALTER TABLE booklocation
    -> CHANGE place booklocatedat varchar(100);
Query OK, 10 rows affected (0.34 sec)
Records: 10  Duplicates: 0  Warnings: 0

mysql>
mysql>
mysql> UPDATE contact
    -> SET contacttype='phone'
    -> WHERE memberid=1;
Query OK, 0 rows affected (0.05 sec)
Rows matched: 1  Changed: 0  Warnings: 0

mysql>
mysql>
mysql> UPDATE issueddetails
    -> SET issuedate='2016-01-12'
    -> WHERE bookid=1;
Query OK, 1 row affected (0.06 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql>
```