# LIBRARY MANAGEMENT SYSTEM

# USING BY MYSQL

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Batch: CH02

Project Name: Library Management System

**SQL (Structured Query Language),** which stands for Structured Query Language, is a domain-specific language used for managing and manipulating relational databases.

**MySQL** is an open-source relational database management system (RDBMS) that uses SQL as its query language. It is one of the most popular and widely used RDBMSs in the world. MySQL is known for its speed, reliability, and ease of use.

**You have been assigning to create a database of library management database system that should store information about publisher, books, member, borrowed.**

**Steps:**

- Open MySQL and Create a Database with database_name called "Library"

```
MySQL 8.0 Command Line Cli  ×   +  ∨

Enter password: **********
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 121
Server version: 8.0.36 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

```
mysql> create database library_database;
Query OK, 1 row affected (0.01 sec)
```

- Show the database

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| amitdb             |
| ch02               |
| college            |
| information_schema |
| library_database   |
| library_project    |
| mysql              |
| performance_schema |
| sql_hr             |
| sql_inventory      |
| sql_invoicing      |
| sql_store          |
| sys                |
| test               |
| xyz                |
+--------------------+
15 rows in set (0.00 sec)
```

- Use the database

```
mysql> use library_database;
Database changed
```

- Create Tables of Publisher, Books, Member, Borrowed. Specify necessary columns
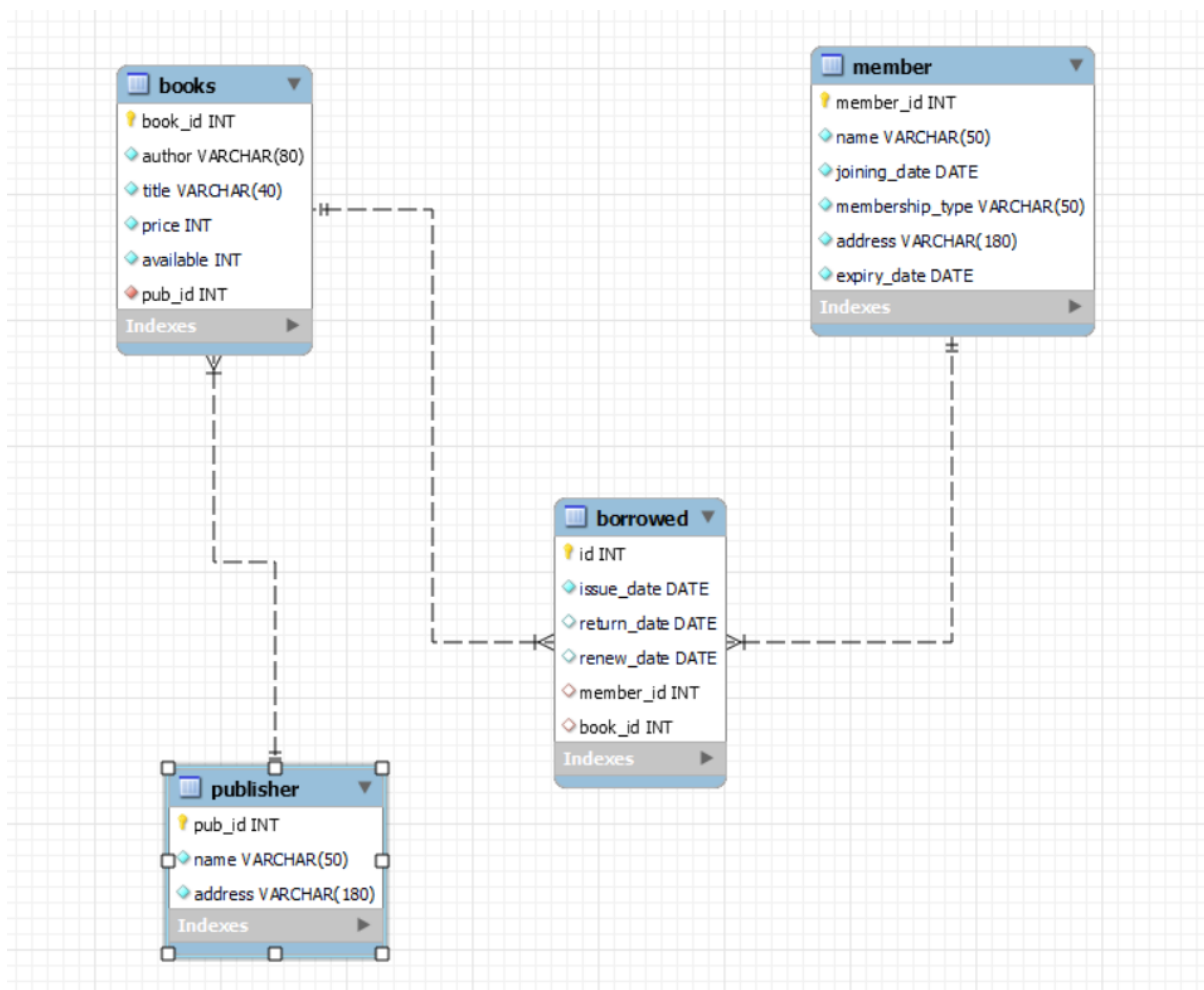  and data types for each table

```
mysql> create table publisher (
    -> pub_id int primary key,
    -> name varchar(50) not null,
    -> address varchar(180) not null);
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> create table books (
    -> book_id int primary key auto_increment,
    -> author varchar(80) not null,
    -> title varchar(40) not null,
    -> price int not null,
    -> available int not null,
    -> pub_id int not null,
    -> foreign key (pub_id) references publisher(pub_id));
Query OK, 0 rows affected (0.05 sec)
```

```
mysql> create table member (
    -> member_id int primary key auto_increment,
    -> name varchar(50) not null,
    -> joining_date date not null,
    -> membership_type varchar(50) not null,
    -> address varchar(180) not null,
    -> expiry_date date not null);
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> create table borrowed (
    -> id int primary key auto_increment,
    -> issue_date date not null,
    -> return_date date,
    -> renew_date date,
    -> member_id int,
    -> foreign key (member_id) references member(member_id),
    -> book_id int,
    -> foreign key (book_id) references books(book_id));
Query OK, 0 rows affected (0.05 sec)
```

- ER Diagram



- Description of tables

```
mysql> desc books;
+-----------+-------------+------+-----+---------+----------------+
| Field     | Type        | Null | Key | Default | Extra          |
+-----------+-------------+------+-----+---------+----------------+
| book_id   | int         | NO   | PRI | NULL    | auto_increment |
| author    | varchar(80) | NO   |     | NULL    |                |
| title     | varchar(40) | NO   |     | NULL    |                |
| price     | int         | NO   |     | NULL    |                |
| available | int         | NO   |     | NULL    |                |
| pub_id    | int         | NO   | MUL | NULL    |                |
+-----------+-------------+------+-----+---------+----------------+
6 rows in set (0.01 sec)
```

```
mysql> desc borrowed;
+-------------+------+------+-----+---------+----------------+
| Field       | Type | Null | Key | Default | Extra          |
+-------------+------+------+-----+---------+----------------+
| id          | int  | NO   | PRI | NULL    | auto_increment |
| issue_date  | date | NO   |     | NULL    |                |
| return_date | date | YES  |     | NULL    |                |
| renew_date  | date | YES  |     | NULL    |                |
| member_id   | int  | YES  | MUL | NULL    |                |
| book_id     | int  | YES  | MUL | NULL    |                |
+-------------+------+------+-----+---------+----------------+
6 rows in set (0.00 sec)
```

```
mysql> desc member;
+-----------------+--------------+------+-----+---------+----------------+
| Field           | Type         | Null | Key | Default | Extra          |
+-----------------+--------------+------+-----+---------+----------------+
| member_id       | int          | NO   | PRI | NULL    | auto_increment |
| name            | varchar(50)  | NO   |     | NULL    |                |
| joining_date    | date         | NO   |     | NULL    |                |
| membership_type | varchar(50)  | NO   |     | NULL    |                |
| address         | varchar(180) | NO   |     | NULL    |                |
| expiry_date     | date         | NO   |     | NULL    |                |
+-----------------+--------------+------+-----+---------+----------------+
6 rows in set (0.00 sec)
```

```
mysql> desc publisher;
+---------+--------------+------+-----+---------+-------+
| Field   | Type         | Null | Key | Default | Extra |
+---------+--------------+------+-----+---------+-------+
| pub_id  | int          | NO   | PRI | NULL    |       |
| name    | varchar(50)  | NO   |     | NULL    |       |
| address | varchar(180) | NO   |     | NULL    |       |
+---------+--------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

- Insert data into tables

```
mysql> insert into publisher values (
    -> 10, "Jaico Publishing House", "delhi"),
    -> (20, "Westland Publications", "hyderabad"),
    -> (30, "Penguin Random House India", "odisha"),
    -> (40, "Roli Books", "bangaluru"),
    -> (50, "Rupa Publications", "mumbai"),
    -> (60, "Hachette India", "chennia"),
    -> (70, "Aleph Book Company", "odisha");
Query OK, 7 rows affected (0.01 sec)
Records: 7  Duplicates: 0  Warnings: 0
```

```
mysql> insert into books
    -> values (1, "Bhavik Sarkhedi", "The God of Small Things", 1000, 10, 10);
Query OK, 1 row affected (0.01 sec)

mysql> insert into books values
    -> (2, "Arundhati Roy", "My Experiments with Truth", 1250, 4, 20),
    -> (3, "Sarat Chandra Chattopadhyay", "Maximum City", 150, 100, 30),
    -> (4, "Amrita Pritam", "A Fine Balance", 1500, 150, 40),
    -> (5, "R.K. Narayan", "India: A Million Mutinies Now", 1820, 55, 50),
    -> (6, "Aravind Adiga", "The Autobiography of an Unknown Indian", 1825, 58, 60),
    -> (7, "Shashi Tharoor", "A Suitable Boy", 9825, 68, 70);
Query OK, 6 rows affected (0.01 sec)
Records: 6  Duplicates: 0  Warnings: 0
```

```
mysql> insert into member values
    -> (1, "sk sahil ali", "2024-07-09", "premium", "odisha", "2025-07-09"),
    -> (2, "soumitra kumar hota", "2023-08-12", "standard", "hyderabad", "2024-07-09"),
    -> (3, "dharma sahoo", "2022-10-22", "basic", "mumbai", "2024-08-28");
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

```
mysql> insert into member values
    -> (4, "junaid khan", "2020-08-09", "premium", "delhi", "2021-07-09"),
    -> (5, "sarfaraj khan", "2022-10-09", "standard", "bangaluru", "2023-12-09");
Query OK, 2 rows affected (0.01 sec)
Records: 2  Duplicates: 0  Warnings: 0
```

```
mysql> insert into borrowed values
    -> (1, "2024-07-10", null, "2024-08-10", 1, 4),
    -> (2, "2023-08-12", null, "2023-09-10", 2, 3),
    -> (3, "2022-10-24", null, "2022-11-10", 3, 1),
    -> (4, "2020-08-10", null, "2020-11-10", 4, 5),
    -> (5, "2022-10-09", null, "2022-11-10", 5, 7);
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

- Retrieving data Using SELECT command

```
mysql> select * from publisher;
+--------+----------------------------+-----------+
| pub_id | name                       | address   |
+--------+----------------------------+-----------+
|     10 | Jaico Publishing House     | delhi     |
|     20 | Westland Publications      | hyderabad |
|     30 | Penguin Random House India | odisha    |
|     40 | Roli Books                 | bangaluru |
|     50 | Rupa Publications          | mumbai    |
|     60 | Hachette India             | chennia   |
|     70 | Aleph Book Company         | odisha    |
+--------+----------------------------+-----------+
7 rows in set (0.00 sec)
```

```
mysql> select * from books;
+---------+----------------------------+-------------------------------------+-------+-----------+--------+
| book_id | author                     | title                               | price | available | pub_id |
+---------+----------------------------+-------------------------------------+-------+-----------+--------+
|       1 | Bhavik Sarkhedi            | The God of Small Things             |  1000 |        10 |     10 |
|       2 | Arundhati Roy              | My Experiments with Truth           |  1250 |         4 |     20 |
|       3 | Sarat Chandra Chattopadhyay| Maximum City                        |   150 |       100 |     30 |
|       4 | Amrita Pritam              | A Fine Balance                      |  1500 |       150 |     40 |
|       5 | R.K. Narayan               | India: A Million Mutinies Now       |  1820 |        55 |     50 |
|       6 | Aravind Adiga              | The Autobiography of an Unknown Indian | 1825 |       58 |     60 |
|       7 | Shashi Tharoor             | A Suitable Boy                      |  9825 |        68 |     70 |
+---------+----------------------------+-------------------------------------+-------+-----------+--------+
7 rows in set (0.00 sec)
```

```
mysql> select * from borrowed;
+----+------------+-------------+------------+-----------+---------+
| id | issue_date | return_date | renew_date | member_id | book_id |
+----+------------+-------------+------------+-----------+---------+
|  1 | 2024-07-10 | NULL        | 2024-08-10 |         1 |       4 |
|  2 | 2023-08-12 | NULL        | 2023-09-10 |         2 |       3 |
|  3 | 2022-10-24 | NULL        | 2022-11-10 |         3 |       1 |
|  4 | 2020-08-10 | NULL        | 2020-11-10 |         4 |       5 |
|  5 | 2022-10-09 | NULL        | 2022-11-10 |         5 |       7 |
+----+------------+-------------+------------+-----------+---------+
5 rows in set (0.00 sec)
```

```
mysql> select * from member;
+-----------+--------------------+--------------+-----------------+-----------+-------------+
| member_id | name               | joining_date | membership_type | address   | expiry_date |
+-----------+--------------------+--------------+-----------------+-----------+-------------+
|         1 | sk sahil ali       | 2024-07-09   | premium         | odisha    | 2025-07-09  |
|         2 | soumitra kumar hota| 2023-08-12   | standard        | hyderabad | 2024-07-09  |
|         3 | dharma sahoo       | 2022-10-22   | basic           | mumbai    | 2024-08-28  |
|         4 | junaid khan        | 2020-08-09   | premium         | delhi     | 2021-07-09  |
|         5 | sarfaraj khan      | 2022-10-09   | standard        | bangaluru | 2023-12-09  |
+-----------+--------------------+--------------+-----------------+-----------+-------------+
5 rows in set (0.00 sec)
```

- Delete command

```
mysql> select * from books;
+---------+-----------------------------+-------------------------------------+-------+-----------+--------+
| book_id | author                      | title                               | price | available | pub_id |
+---------+-----------------------------+-------------------------------------+-------+-----------+--------+
|       1 | Bhavik Sarkhedi             | The God of Small Things             |  1000 |        10 |     10 |
|       2 | Arundhati Roy               | My Experiments with Truth           |  1250 |         4 |     20 |
|       3 | Sarat Chandra Chattopadhyay | Maximum City                        |   150 |       100 |     30 |
|       4 | Amrita Pritam               | A Fine Balance                      |  1500 |       150 |     40 |
|       5 | R.K. Narayan                | India: A Million Mutinies Now       |  1820 |        55 |     50 |
|       6 | Aravind Adiga               | The Autobiography of an Unknown Indian | 1825 |        58 |     60 |
|       7 | Shashi Tharoor              | A Suitable Boy                      |  9825 |        68 |     70 |
+---------+-----------------------------+-------------------------------------+-------+-----------+--------+
7 rows in set (0.00 sec)
```

```
mysql> delete from books where book_id = 6;
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from books;
+---------+-----------------------------+-------------------------------+-------+-----------+--------+
| book_id | author                      | title                         | price | available | pub_id |
+---------+-----------------------------+-------------------------------+-------+-----------+--------+
|       1 | Bhavik Sarkhedi             | The God of Small Things       |  1000 |        10 |     10 |
|       2 | Arundhati Roy               | My Experiments with Truth     |  1250 |         4 |     20 |
|       3 | Sarat Chandra Chattopadhyay | Maximum City                  |   150 |       100 |     30 |
|       4 | Amrita Pritam               | A Fine Balance                |  1500 |       150 |     40 |
|       5 | R.K. Narayan                | India: A Million Mutinies Now |  1820 |        55 |     50 |
|       7 | Shashi Tharoor              | A Suitable Boy                |  9825 |        68 |     70 |
+---------+-----------------------------+-------------------------------+-------+-----------+--------+
6 rows in set (0.00 sec)
```

- Operators

```
mysql> select count(book_id) as total_books, sum(price) as total_stock_price from books ;
+-------------+-------------------+
| total_books | total_stock_price |
+-------------+-------------------+
|           6 |             15545 |
+-------------+-------------------+
1 row in set (0.01 sec)
```

```
mysql> select * from books where available >50;
+---------+-----------------------------+-------------------------------+-------+-----------+--------+
| book_id | author                      | title                         | price | available | pub_id |
+---------+-----------------------------+-------------------------------+-------+-----------+--------+
|       3 | Sarat Chandra Chattopadhyay | Maximum City                  |   150 |       100 |     30 |
|       4 | Amrita Pritam               | A Fine Balance                |  1500 |       150 |     40 |
|       5 | R.K. Narayan                | India: A Million Mutinies Now |  1820 |        55 |     50 |
|       7 | Shashi Tharoor              | A Suitable Boy                |  9825 |        68 |     70 |
+---------+-----------------------------+-------------------------------+-------+-----------+--------+
4 rows in set (0.00 sec)
```

```
mysql> select * from books where available >50 and author="sarat chandra chattopadhyay";
+---------+-----------------------------+--------------+-------+-----------+--------+
| book_id | author                      | title        | price | available | pub_id |
+---------+-----------------------------+--------------+-------+-----------+--------+
|       3 | Sarat Chandra Chattopadhyay | Maximum City |   150 |       100 |     30 |
+---------+-----------------------------+--------------+-------+-----------+--------+
1 row in set (0.00 sec)
```

- LIKE operator

```
mysql> select * from member where name like "J%";
+-----------+------------+--------------+-----------------+---------+-------------+
| member_id | name       | joining_date | membership_type | address | expiry_date |
+-----------+------------+--------------+-----------------+---------+-------------+
|         4 | junaid khan | 2020-08-09  | premium         | delhi   | 2021-07-09  |
+-----------+------------+--------------+-----------------+---------+-------------+
1 row in set (0.01 sec)
```

- BETWEEN operator

```
mysql> select * from books where price between 100 and 1000;
+---------+----------------------------+-----------------------+-------+-----------+--------+
| book_id | author                     | title                 | price | available | pub_id |
+---------+----------------------------+-----------------------+-------+-----------+--------+
|       1 | Bhavik Sarkhedi            | The God of Small Things | 1000 |        10 |     10 |
|       3 | Sarat Chandra Chattopadhyay | Maximum City          |   150 |       100 |     30 |
+---------+----------------------------+-----------------------+-------+-----------+--------+
2 rows in set (0.01 sec)
```

- IN operator

```
mysql> desc publisher;
+---------+--------------+------+-----+---------+-------+
| Field   | Type         | Null | Key | Default | Extra |
+---------+--------------+------+-----+---------+-------+
| pub_id  | int          | NO   | PRI | NULL    |       |
| name    | varchar(50)  | NO   |     | NULL    |       |
| address | varchar(180) | NO   |     | NULL    |       |
+---------+--------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

- CREATE VIEW

```
mysql> create view books_stock as (select author, title, price, available from books);
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> select * from books_stock;
+----------------------------+-------------------------+-------+-----------+
| author                     | title                   | price | available |
+----------------------------+-------------------------+-------+-----------+
| Bhavik Sarkhedi            | The God of Small Things |  1000 |        10 |
| Arundhati Roy              | My Experiments with Truth |  1250 |         4 |
| Sarat Chandra Chattopadhyay | Maximum City            |   150 |       100 |
| Amrita Pritam              | A Fine Balance          |  1500 |       150 |
| R.K. Narayan               | India: A Million Mutinies Now | 1820 |      55 |
| Shashi Tharoor             | A Suitable Boy          |  9825 |        68 |
+----------------------------+-------------------------+-------+-----------+
6 rows in set (0.01 sec)
```

- Aggrigate Functions

```
mysql> select sum(price) as total_book_cost_in_stock, sum(available) as total_book_available_in_stock from books;
+--------------------------+-------------------------------+
| total_book_cost_in_stock | total_book_available_in_stock |
+--------------------------+-------------------------------+
|                    15545 |                           387 |
+--------------------------+-------------------------------+
1 row in set (0.00 sec)
```

```
mysql> select count(member_id) as total_member_in_library from member;
+-------------------------+
| total_member_in_library |
+-------------------------+
|                       5 |
+-------------------------+
1 row in set (0.01 sec)
```

```
mysql> select max(price) as max_price_of_the_book from books;
+-----------------------+
| max_price_of_the_book |
+-----------------------+
|                  9825 |
+-----------------------+
1 row in set (0.01 sec)
```

```
mysql> select * from books where price in (select min(price) from books);
+---------+---------------------------+--------------+-------+-----------+--------+
| book_id | author                    | title        | price | available | pub_id |
+---------+---------------------------+--------------+-------+-----------+--------+
|       3 | Sarat Chandra Chattopadhyay | Maximum City |   150 |       100 |     30 |
+---------+---------------------------+--------------+-------+-----------+--------+
1 row in set (0.01 sec)
```

```
mysql> select avg(price) from books;
+------------+
| avg(price) |
+------------+
|  2590.8333 |
+------------+
1 row in set (0.00 sec)
```

- Cross join

```
mysql> select * from books corss join publisher ;
+---------+-----------------------------+--------------------------------+-------+-----------+--------+--------+-----------------------------+-----------+
| book_id | author                      | title                          | price | available | pub_id | pub_id | name                        | address   |
+---------+-----------------------------+--------------------------------+-------+-----------+--------+--------+-----------------------------+-----------+
|       7 | Shashi Tharoor              | A Suitable Boy                 | 9825  |        68 |     70 |     10 | Jaico Publishing House      | delhi     |
|       5 | R.K. Narayan                | India: A Million Mutinies Now  | 1820  |        55 |     50 |     10 | Jaico Publishing House      | delhi     |
|       4 | Amrita Pritam               | A Fine Balance                 | 1500  |       150 |     40 |     10 | Jaico Publishing House      | delhi     |
|       3 | Sarat Chandra Chattopadhyay | Maximum City                   |  150  |       100 |     30 |     10 | Jaico Publishing House      | delhi     |
|       2 | Arundhati Roy               | My Experiments with Truth      | 1250  |         4 |     20 |     10 | Jaico Publishing House      | delhi     |
|       1 | Bhavik Sarkhedi             | The God of Small Things        | 1000  |        10 |     10 |     10 | Jaico Publishing House      | delhi     |
|       7 | Shashi Tharoor              | A Suitable Boy                 | 9825  |        68 |     70 |     20 | Westland Publications       | hyderabad |
|       5 | R.K. Narayan                | India: A Million Mutinies Now  | 1820  |        55 |     50 |     20 | Westland Publications       | hyderabad |
|       4 | Amrita Pritam               | A Fine Balance                 | 1500  |       150 |     40 |     20 | Westland Publications       | hyderabad |
|       3 | Sarat Chandra Chattopadhyay | Maximum City                   |  150  |       100 |     30 |     20 | Westland Publications       | hyderabad |
|       2 | Arundhati Roy               | My Experiments with Truth      | 1250  |         4 |     20 |     20 | Westland Publications       | hyderabad |
|       1 | Bhavik Sarkhedi             | The God of Small Things        | 1000  |        10 |     10 |     20 | Westland Publications       | hyderabad |
|       7 | Shashi Tharoor              | A Suitable Boy                 | 9825  |        68 |     70 |     30 | Penguin Random House India  | odisha    |
|       5 | R.K. Narayan                | India: A Million Mutinies Now  | 1820  |        55 |     50 |     30 | Penguin Random House India  | odisha    |
|       4 | Amrita Pritam               | A Fine Balance                 | 1500  |       150 |     40 |     30 | Penguin Random House India  | odisha    |
|       3 | Sarat Chandra Chattopadhyay | Maximum City                   |  150  |       100 |     30 |     30 | Penguin Random House India  | odisha    |
|       2 | Arundhati Roy               | My Experiments with Truth      | 1250  |         4 |     20 |     30 | Penguin Random House India  | odisha    |
|       1 | Bhavik Sarkhedi             | The God of Small Things        | 1000  |        10 |     10 |     30 | Penguin Random House India  | odisha    |
|       7 | Shashi Tharoor              | A Suitable Boy                 | 9825  |        68 |     70 |     40 | Roli Books                  | bangaluru |
|       5 | R.K. Narayan                | India: A Million Mutinies Now  | 1820  |        55 |     50 |     40 | Roli Books                  | bangaluru |
|       4 | Amrita Pritam               | A Fine Balance                 | 1500  |       150 |     40 |     40 | Roli Books                  | bangaluru |
|       3 | Sarat Chandra Chattopadhyay | Maximum City                   |  150  |       100 |     30 |     40 | Roli Books                  | bangaluru |
|       2 | Arundhati Roy               | My Experiments with Truth      | 1250  |         4 |     20 |     40 | Roli Books                  | bangaluru |
|       1 | Bhavik Sarkhedi             | The God of Small Things        | 1000  |        10 |     10 |     40 | Roli Books                  | bangaluru |
|       7 | Shashi Tharoor              | A Suitable Boy                 | 9825  |        68 |     70 |     50 | Rupa Publications           | mumbai    |
|       5 | R.K. Narayan                | India: A Million Mutinies Now  | 1820  |        55 |     50 |     50 | Rupa Publications           | mumbai    |
|       4 | Amrita Pritam               | A Fine Balance                 | 1500  |       150 |     40 |     50 | Rupa Publications           | mumbai    |
|       3 | Sarat Chandra Chattopadhyay | Maximum City                   |  150  |       100 |     30 |     50 | Rupa Publications           | mumbai    |
|       2 | Arundhati Roy               | My Experiments with Truth      | 1250  |         4 |     20 |     50 | Rupa Publications           | mumbai    |
|       1 | Bhavik Sarkhedi             | The God of Small Things        | 1000  |        10 |     10 |     50 | Rupa Publications           | mumbai    |
|       7 | Shashi Tharoor              | A Suitable Boy                 | 9825  |        68 |     70 |     60 | Hachette India              | chennia   |
|       5 | R.K. Narayan                | India: A Million Mutinies Now  | 1820  |        55 |     50 |     60 | Hachette India              | chennia   |
|       4 | Amrita Pritam               | A Fine Balance                 | 1500  |       150 |     40 |     60 | Hachette India              | chennia   |
|       3 | Sarat Chandra Chattopadhyay | Maximum City                   |  150  |       100 |     30 |     60 | Hachette India              | chennia   |
|       2 | Arundhati Roy               | My Experiments with Truth      | 1250  |         4 |     20 |     60 | Hachette India              | chennia   |
|       1 | Bhavik Sarkhedi             | The God of Small Things        | 1000  |        10 |     10 |     60 | Hachette India              | chennia   |
|       7 | Shashi Tharoor              | A Suitable Boy                 | 9825  |        68 |     70 |     70 | Aleph Book Company          | odisha    |
|       5 | R.K. Narayan                | India: A Million Mutinies Now  | 1820  |        55 |     50 |     70 | Aleph Book Company          | odisha    |
|       4 | Amrita Pritam               | A Fine Balance                 | 1500  |       150 |     40 |     70 | Aleph Book Company          | odisha    |
|       3 | Sarat Chandra Chattopadhyay | Maximum City                   |  150  |       100 |     30 |     70 | Aleph Book Company          | odisha    |
|       2 | Arundhati Roy               | My Experiments with Truth      | 1250  |         4 |     20 |     70 | Aleph Book Company          | odisha    |
|       1 | Bhavik Sarkhedi             | The God of Small Things        | 1000  |        10 |     10 |     70 | Aleph Book Company          | odisha    |
+---------+-----------------------------+--------------------------------+-------+-----------+--------+--------+-----------------------------+-----------+
42 rows in set (0.00 sec)
```

- Natural Join

```
mysql> select * from books natural join publisher ;
+--------+---------+-----------------------------+--------------------------------+-------+-----------+-----------------------------+-----------+
| pub_id | book_id | author                      | title                          | price | available | name                        | address   |
+--------+---------+-----------------------------+--------------------------------+-------+-----------+-----------------------------+-----------+
|     10 |       1 | Bhavik Sarkhedi             | The God of Small Things        | 1000  |        10 | Jaico Publishing House      | delhi     |
|     20 |       2 | Arundhati Roy               | My Experiments with Truth      | 1250  |         4 | Westland Publications       | hyderabad |
|     30 |       3 | Sarat Chandra Chattopadhyay | Maximum City                   |  150  |       100 | Penguin Random House India  | odisha    |
|     40 |       4 | Amrita Pritam               | A Fine Balance                 | 1500  |       150 | Roli Books                  | bangaluru |
|     50 |       5 | R.K. Narayan                | India: A Million Mutinies Now  | 1820  |        55 | Rupa Publications           | mumbai    |
|     70 |       7 | Shashi Tharoor              | A Suitable Boy                 | 9825  |        68 | Aleph Book Company          | odisha    |
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