# Library Management System

**Topic: Library Management System** 

To build a project based on Library Management System. It keeps track of all information about books in the library, their cost, status and total number of books available in the library.

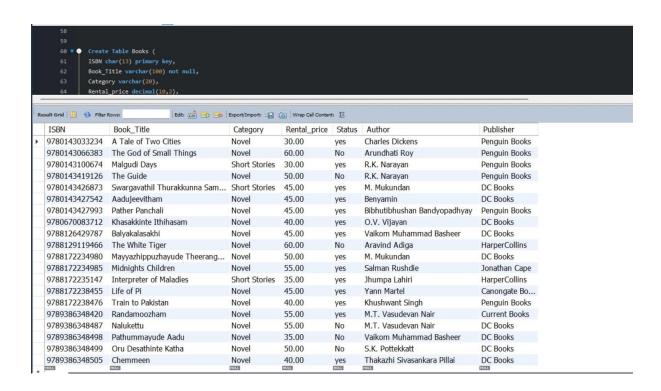
1) TABLE BRANCH

```
Create Database Library;
          use library;
     7 • ◆ Create Table Branch (
           branch no int auto increment primary key,
           manager id int,
           branch_address varchar(200),
    10
           contact no bigint);
    11
    12
           Insert into branch (manager_id,branch_address,contact_no)
    13 •
    14
    15
          (1, 'trivandrum', '04936274831'),
          (2, 'Kochi', '04842345678'),
    16
          (3, 'Kozhikode', '04953456789'),
    17
          (4, 'Thrissur', '04874567890');
    18
    19
Edit: 🚰 📆 📙 Export/Import: 📳 👸 Wrap Cell Content: 🏗
  branch_no manager_id branch_address contact_no
                       trivandrum
            1
                                     4936274831
 1
  2
            2
                       Kochi
                                     4842345678
  3
                       Kozhikode
            3
                                     4953456789
  4
            4
                       Thrissur
                                     4874567890
           NULL
 HULL
```

#### 2) TABLE EMPLOYEE

```
32 • •
            Create TABLE employee (
            branch_no int,
            employee_id int primary key,
    34
            emp name char(50) not null,
            emp_position varchar(25),
            emp_salary bigint,
             FOREIGN KEY (Branch no) REFERENCES Branch(Branch no)
    40
    41 •
            desc employee;
            INSERT INTO Employee (Branch_no, Employee_id, Emp_name, Emp_position, Emp_salary)
Edit: 🔏 📆 📙 Export/Import: 📳 🚡 Wrap Cell Content: 🏗
  branch_no
             employee_id
                         emp_name
                                       emp_position
                                                    emp_salary
  1
            101
                         Amal Das
                                      Clerk
                                                   25000
  1
            102
                         Nikhil Raj
                                      Assistant
                                                   30000
  1
            103
                         Anoop S.
                                      Manager
                                                   55000
 2
            201
                         Reena Nair
                                      Librarian
                                                   40000
  2
            202
                         Sanjay Menon
                                      Clerk
                                                   25000
  2
            203
                         Divya M.
                                      Assistant
                                                   28000
 3
            301
                         Priya Varma
                                      Manager
                                                   50000
 3
            302
                                      Assistant
                         Vishnu Kumar
                                                   32000
  4
            401
                                      Clerk
                                                   26000
                         Anjali R.
  4
            402
                                      Librarian
                                                   42000
                         Ravi P.
```

## 3) TABLE BOOKS



## 4) TABLE CUSTOMER

Cu	stomer_Id	Customer_name	Customer_address	Reg_date
1		Ravi Kumar	123 MG Road, Kochi, Kerala	2023-01-15
2		Anjali Menon	45 SP Nagar, Trivandrum, Kerala	2022-12-20
3		Vikram Raj	67 Gandhi Road, Thrissur, Kerala	2023-02-10
4		Meera Nair	89 Nehru Avenue, Kozhikode, K	2022-11-05
5		Arjun Das	101 Palm Street, Kochi, Kerala	2023-03-22
6		Lakshmi Priya	23 Sea View, Trivandrum, Kerala	2022-09-17
7		Kiran Mohan	56 Hilltop Road, Thrissur, Kerala	2023-04-12
8		Nandini Ramesh	78 MG Road, Kozhikode, Kerala	2022-10-10
9		Suresh Iyer	12 Lakeview Street, Kochi, Kerala	2023-01-25
10		Divya S	34 Temple Road, Trivandrum,	2023-05-05
11		Arun Kumar	abc MG Road, bathery, Kerala	2021-01-1

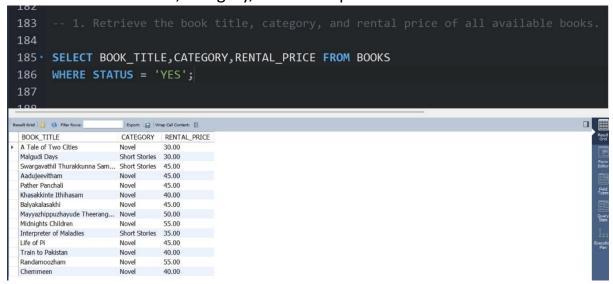
#### 5)TABLE ISSUE STATUS

```
128
   129 • ♦ CREATE TABLE IssueStatus (
               Issue Id INT PRIMARY KEY,
   131
               Issued_customer INT,
               Issued book name VARCHAR(100),
   132
               Issue_date DATE,
               Isbn_book VARCHAR(13),
   134
   135
               FOREIGN KEY (Issued customer) REFERENCES Customer (Customer Id),
               FOREIGN KEY (Isbn_book) REFERENCES Books(ISBN)
   136
   137
   138
   139
Edit: 🕍 📆 Export/Import: 📳 🦝 | Wrap Cell Content: 🏗
  Issue_Id Issued_customer
                          Issued_book_name
                                                 Issue_date
                                                            Isbn book
                          Aadujeevitham
                                                 2023-06-01 9780143427542
  1
           1
           2
  2
                          The God of Small Things 2023-06-05 9780143066383
  3
           3
                          Interpreter of Maladies
                                                 2023-06-10 9788172235147
           4
  4
                          Khasakkinte Ithihasam
                                                2023-06-15 9780670083712
  5
           5
                          Balyakalasakhi
                                                 2023-06-20 9788126429787
  6
           6
                          The White Tiger
                                                 2023-06-25 9788129119466
  7
           7
                          Malgudi Days
                                                 2023-06-30 9780143100674
 8
           8
                                                 2023-07-05 9789386348505
                          Chemmeen
  9
           9
                          Train to Pakistan
                                                 2023-07-10
                                                            9788172238476
  10
           10
                          Oru Desathinte Katha
                                                2023-07-15
                                                            9789386348499
```

## 6) TABLE RETURN STATUS

```
157 • ♦ CREATE TABLE ReturnStatus (
              Return_Id INT PRIMARY KEY,
              Return_cust INT,
              Return_book_name VARCHAR(100),
              Return date DATE,
               Isbn book2 VARCHAR(13),
              FOREIGN KEY (Return_cust) REFERENCES Customer(Customer_Id),
               FOREIGN KEY (Isbn_book2) REFERENCES Books(ISBN)
   167 • INSERT INTO ReturnStatus (Return_Id, Return_cust, Return_book_name, Return_date, Isbn_book2)
Edit: 🔏 📆 📙 Export/Import: 📳 🐚 | Wrap Cell Content: 🏗
  Return_Id Return_cust Return_book_name
                                            Return_date Isbn_book2
                       Aadujeevitham
                                            2023-06-20 9780143427542
                      The God of Small Things 2023-06-25 9780143066383
 2
           2
 3
           3
                      Interpreter of Maladies
                                            2023-07-01 9788172235147
 4
           4
                      Khasakkinte Ithihasam
                                            2023-07-05 9780670083712
 5
           5
                      Balvakalasakhi
                                            2023-07-10 9788126429787
 6
           6
                      The White Tiger
                                            2023-07-15 9788129119466
 7
                      Malgudi Days
                                            2023-07-20 9780143100674
 8
           8
                      Chemmeen
                                            2023-07-25 9789386348505
 9
                       Train to Pakistan
                                            2023-07-30
                                                       9788172238476
                                            2023-08-01 9789386348499
 10
           10
                      Oru Desathinte Katha
```

1. Retrieve the book title, category, and rental price of all available books.



2. List the employee names and their respective salaries in descending order of salary.



3. Retrieve the book titles and the corresponding customers who have issued those books.



4. Display the total count of books in each category.

5. Retrieve the employee names and their positions for the employees whose salaries are above Rs.50,000.

6. List the customer names who registered before 2022-01-01 and have not issued any books yet.

```
212
213 -- 6. List the customer names who registered before 2022-01-01 and
214 -- have not issued any books yet.
215
216 • SELECT Customer_name
217 FROM Customer
218 WHERE Reg_date < '2022-01-01'
219 AND Customer_Id NOT IN (SELECT Issued_customer FROM IssueStatus);
220

ResultGrid | Pater Rous | Esport | Esp
```

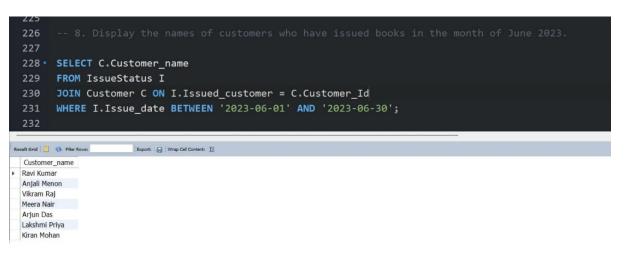
7. Display the branch numbers and the total count of employees in each branch.

```
220
221 -- 7. Display the branch numbers and the total count of employees in each branch.

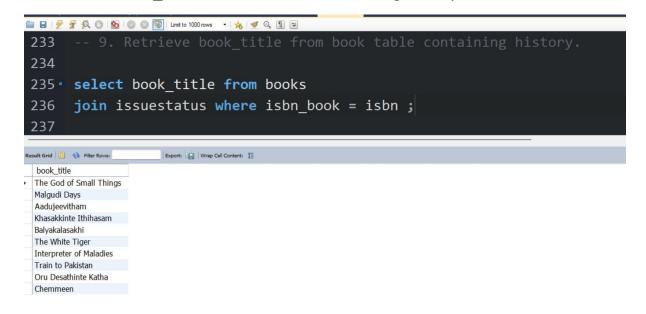
222
223 * select branch_no, count(*)
224 as total_employees from employee group by branch_no;
225
226

Result Grid ** Filter Rovat** | Exports ** Expor
```

8. Display the names of customers who have issued books in the month of June 2023.



9. Retrieve book title from book table containing history.



10. Retrieve the branch numbers along with the count of employees for branches having more than 2 employees

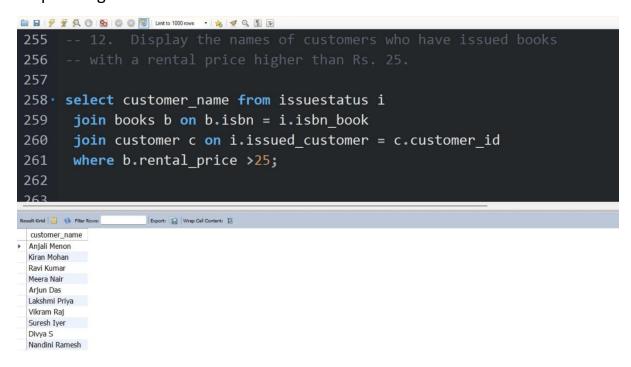
```
238
239 -- 10.Retrieve the branch numbers along with the count
240 -- of employees for branches having more than 2 employees
241
242 * select branch_no , count(*) as total_employees
243 from employee group by branch_no having count(*) > 2;
244
245

Result Grid ** Filter Rows** Export** ** Expo
```

11. Retrieve the names of employees who manage branches and their respective branch addresses.

```
246
247 -- 11. Retrieve the names of employees who manage branches and
248 -- their respective branch addresses.
249
250 • select emp name, branch address, emp position from branch b
      join employee e on e.branch no = b.branch no
251
       where emp_position = 'manager';
252
253
254
           Export: Wrap Cell Content: 1
 emp_name branch_address emp_position
Anoop S.
       trivandrum
                Manager
Priya Varma Kozhikode Manager
```

12. Display the names of customers who have issued books with a rental price higher than Rs. 25.



THE END