Create a database named library and following TABLES in the database:

NULL

- 1. Branch
- 2. Employee
- 3. Books
- 4. Customer
- 5. IssueStatus
- 6. ReturnStatus

Branch\_address varchar(255) YES

Contact\_no varchar(15) YES NULL

```
1.
   1 • CREATE DATABASE library;
   2 • USE library;
   3 • ⊝ CREATE TABLE Branch (
       Branch_no INT PRIMARY KEY,
       Manager_Id INT,
        Branch_address VARCHAR(255),
   6
      Contact_no VARCHAR(15)
   7
   8
       desc branch;
  10
  11
                                    Export: Wrap Cell Content: IA
 Result Grid Filter Rows:
                                Key Default Extra
   Field
   Branch_no int NO PRI MULL
Manager_Id int YES
                                      NULL
   Branch_no
```

2.

```
10 ullet CREATE TABLE Employee (
11 Emp_Id INT PRIMARY KEY,
12
     Emp_name VARCHAR(255),
     Position VARCHAR(255),
13
     Salary DECIMAL(10, 2),
14
      Branch_no INT,
15
       FOREIGN KEY (Branch_no) REFERENCES Branch(Branch_no)
16
17
18 • desc employee;
19
20
21
Result Grid | Filter Rows:
                                 Export: Wrap Cell Content: IA
                     Null Key
                                Default Extra
 Field
           Туре
                      NO PRI NULL
 Emp_Id
                                NULL
 Emp_name varchar(255) YES
                                NULL
         varchar(255) YES
 Position
  Salary decimal(10,2) YES
                                HULL
                                NULL
 Branch_no int
                      YES MUL
```

3.

Customer\_name varchar(255) YES

date

YES

YES

Customer\_address varchar(255)

Reg\_date

NULL

HULL

```
19 ullet CREATE TABLE Books (
    20
            ISBN VARCHAR(13) PRIMARY KEY,
            Book_title VARCHAR(255),
    21
            Category VARCHAR(100),
    22
            Rental_Price DECIMAL(10, 2),
    23
            Status VARCHAR(3) CHECK (Status IN ('yes', 'no')),
    24
    25
            Author VARCHAR(255),
    26
            Publisher VARCHAR(255)
    27
            );
            desc books;
    28 •
    29
    30
                                         Export: Wrap Cell Content: 1A
   Result Grid Filter Rows:
                  Type
                                   Key
                                         Default Extra
                                         NULL
   ▶ ISBN
                  varchar(13)
                             NO
                                    PRI
                                         NULL
      Book_title
                 varchar(255) YES
                                          NULL
      Category
                  varchar(100)
                                         NULL
      Rental_Price decimal(10,2) YES
                                         NULL
     Status
                 varchar(3)
                              YES
                                         NULL
      Author
                 varchar(255) YES
                                         NULL
     Publisher
                 varchar(255) YES
4.
   29 \bullet \ominus CREATE TABLE Customer (
   30
           Customer_Id INT PRIMARY KEY,
   31
           Customer_name VARCHAR(255),
           Customer_address VARCHAR(255),
   32
   33
           Reg_date DATE
   34
           );
   35 •
           desc customer;
   36
   37
   38
   39
   40
  Result Grid | Filter Rows:
                                        Export: Wrap Cell Content: IA
                                       Key Default Extra
     Field
 ▶ Customer_Id
                                 NO
                                            NULL
                                       PRI
                     int
```

```
36 • ○ CREATE TABLE IssueStatus (
        Issue_Id INT PRIMARY KEY,
 37
        Issued_cust INT,
 38
 39
       Issued_book_name VARCHAR(255),
 40
       Issue date DATE,
       Isbn book VARCHAR(13),
 41
        FOREIGN KEY (Issued_cust) REFERENCES Customer(Customer_Id),
 42
        FOREIGN KEY (Isbn_book) REFERENCES Books(ISBN)
 43
        );
 44
 45 •
        desc IssueStatus;
 46
Result Grid Filter Rows:
                                   Export: Wrap Cell Content: IA
                                  Key Default Extra
   Field
                                       NULL
▶ Issue_Id
                             NO
                                  PRT
                  int
                            YES MUL NULL
                 int
  Issued_cust
                                       NULL
  Issued_book_name varchar(255)
                            YES
                            YES
                                       NULL
  Issue_date
                 date
                            YES MUL NULL
  Isbn_book
                 varchar(13)
```

6.

```
46 • ⊝ CREATE TABLE ReturnStatus (
        Return_Id INT PRIMARY KEY,
47
48
        Return_cust INT,
       Return_book_name VARCHAR(255),
49
 50
        Return_date DATE,
        Isbn_book2 VARCHAR(13),
 51
        FOREIGN KEY (Return_cust) REFERENCES Customer(Customer_Id),
 52
        FOREIGN KEY (Isbn_book2) REFERENCES Books(ISBN)
 53
 54
        desc ReturnStatus;
 55 •
 56
 57
Result Grid Filter Rows:
                                   Export: Wrap Cell Content: IA
  Field
                            Null Key Default Extra
                 Type
 Return_Id
                             NO
                                   PRT
                             YES MUL NULL
  Return_cust
                int
                                        NULL
  Return_book_name varchar(255) YES
                             YES
                                        NULL
  Return_date
                  date
                             YES MUL NULL
  Isbn_book2
                  varchar(13)
```

## **Show Tables**

201

Eve Black

Frank Green

George Brown

Helen Smith

Grace Blue

202

203

204

205

301

David White Assistant 45000.00 1 Assistant

Assistant

Clerk

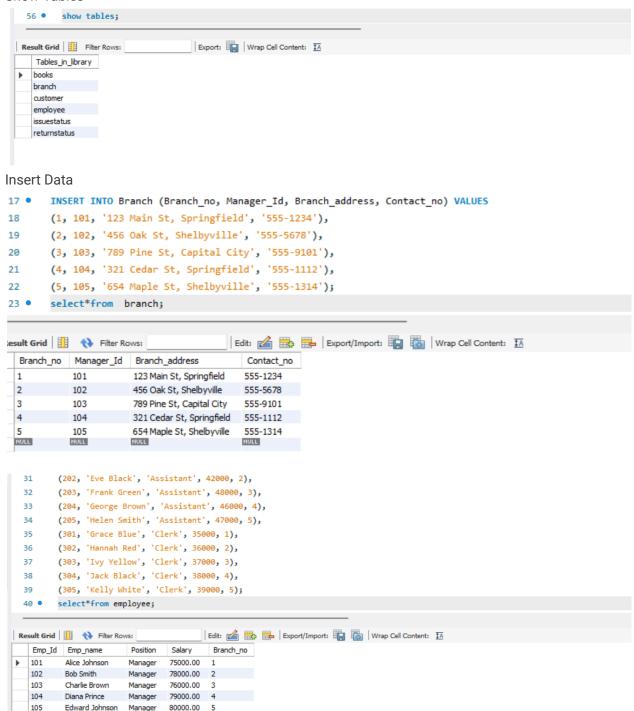
42000.00 2

35000.00 1

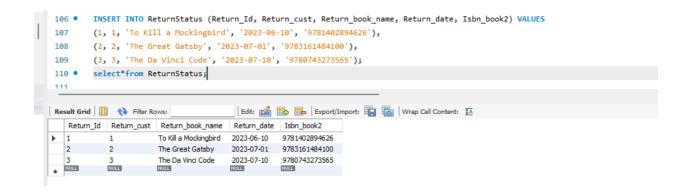
46000.00

Assistant 48000.00 3

Assistant 47000.00 5

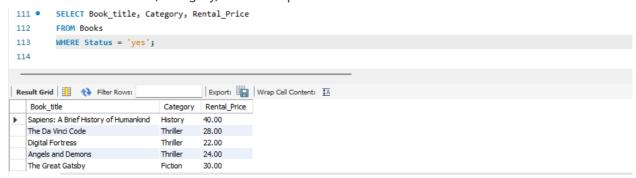


```
INSERT INTO Books (ISBN, Book_title, Category, Rental_Price, Status, Author, Publisher) VALUES
        ('9783161484100', 'The Great Gatsby', 'Fiction', 30.00, 'yes', 'F. Scott Fitzgerald', 'Scribner'),
83
        ('9781402894626', 'To Kill a Mockingbird', 'Fiction', 25.00, 'no', 'Harper Lee', 'J.B. Lippincott & Co.'),
84
        ('9780743273565', 'The Da Vinci Code', 'Thriller', 28.00, 'yes', 'Dan Brown', 'Doubleday'),
        ('9780394523204', 'The History of Ancient Rome', 'History', 35.00, 'no', 'Livy', 'Penguin Books'),
 85
        ('9780743273572', 'Digital Fortress', 'Thriller', 22.00, 'yes', 'Dan Brown', 'St. Martin\'s Press'),
 86
        ('9780670813028', 'Sapiens: A Brief History of Humankind', 'History', 40.00, 'yes', 'Yuval Noah Harari', 'Harper'),
        ('9780743273589', 'Angels and Demons', 'Thriller', 24.00, 'yes', 'Dan Brown', 'Pocket Books');
88
89 •
        select*from books;
                                         | Edit: 🕍 🔜 | Export/Import: 🏣 👸 | Wrap Cell Content: 🔣
ISBN
                Book title
                                              Category Rental_Price Status Author
                                                                                         Publisher
  9780394523204
                The History of Ancient Rome
                                             History
                                                       35.00
                                                                  no
                                                                         Livy
                                                                                         Penguin Books
  9780670813028 Sapiens: A Brief History of Humankind History
                                                      40.00
                                                                         Yuval Noah Harari Harper
                                                                 yes
  9780743273565
                The Da Vinci Code
                                             Thriller
                                                      28.00
                                                                  yes
                                                                         Dan Brown
                                                                                        Doubleday
  9780743273572 Digital Fortress
                                                                                        St. Martin's Press
                                             Thriller
                                                      22.00
                                                                  yes
                                                                         Dan Brown
                                                                  yes
  9780743273589
                Angels and Demons
                                             Thriller
                                                      24.00
                                                                         Dan Brown
                                                                                         Pocket Books
  9781402894626 To Kill a Mockingbird
                                             Fiction
                                                      25.00
                                                                 no
                                                                         Harper Lee
                                                                                        J.B. Lippincott & Co.
  9783161484100 The Great Gatsby
                                             Fiction
                                                      30.00
                                                                        F. Scott Fitzgerald
                                                                                        Scribner
        INSERT INTO Customer (Customer_Id, Customer_name, Customer_address, Reg_date) VALUES
        (1, 'John Doe', '321 Maple St, Springfield', '2021-12-15'),
        (2, 'Jane Smith', '654 Elm St, Shelbyville', '2020-05-10'),
 92
        (3, 'Emily Davis', '987 Birch St, Capital City', '2022-02-20'),
 93
        (4, 'Michael Brown', '147 Oak St, Springfield', '2023-06-05'),
 95
        (5, 'Sarah Wilson', '258 Pine St, Shelbyville', '2021-01-25'),
        (6, 'Robert Johnson', '369 Cedar St, Springfield', '2021-03-30'),
 96
        (7, 'Laura Lee', '741 Cherry St, Capital City', '2020-11-11');
 97
 98
        select*from Customer;
 99
100
| Edit: 🚄 🖶 🖶 | Export/Import: 🏣 📸 | Wrap Cell Content: 🖽
  Customer_Id Customer_name Customer_address
                                                 Reg_date
  1
              John Doe
                            321 Maple St, Springfield
                                                 2021-12-15
  2
              Jane Smith
                          654 Elm St, Shelbyville
                                                 2020-05-10
              Emily Davis
                            987 Birch St, Capital City
                                                 2022-02-20
  3
  4
              Michael Brown 147 Oak St. Springfield
                                                 2023-06-05
  5
              Sarah Wilson
                            258 Pine St. Shelbyville
                                                 2021-01-25
  6
             Robert Johnson 369 Cedar St, Springfield 2021-03-30
              Laura Lee
                            741 Cherry St, Capital City
                                                 2020-11-11
NULL
 99 •
          INSERT INTO IssueStatus (Issue_Id, Issued_cust, Issued_book_name, Issue_date, Isbn_book) VALUES
          (1, 1, 'The Great Gatsby', '2023-05-12', '9783161484100'),
100
          (2, 3, 'The Da Vinci Code', '2023-06-15', '9780743273565'),
101
          (3, 4, 'Digital Fortress', '2023-06-20', '9780743273572'),
102
          (4, 5, 'Sapiens: A Brief History of Humankind', '2023-07-01', '9780670813028'),
103
104
          (5, 6, 'Angels and Demons', '2023-06-25', '9780743273589');
          select* from IssueStatus ;
108
                                            Edit: 🚄 🖶 Export/Import: 📳 🦝 Wrap Cell Content: 🖽
Issue_date
                                                                   Isbn_book
                                                        2023-05-12
                                                                   9783161484100
                        The Da Vinci Code
                                                        2023-06-15 9780743273565
  2
   3
                        Digital Fortress
                                                        2023-06-20 9780743273572
   4
            5
                        Sapiens: A Brief History of Humankind 2023-07-01 9780670813028
                                                        2023-06-25 9780743273589
                        Angels and Demons
  NULL
            NULL
```



## Queries

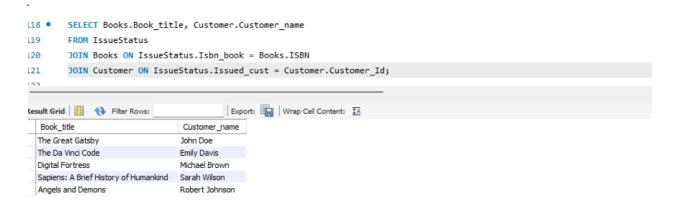
1. Retrieve the book title, category, and rental price of all available books.



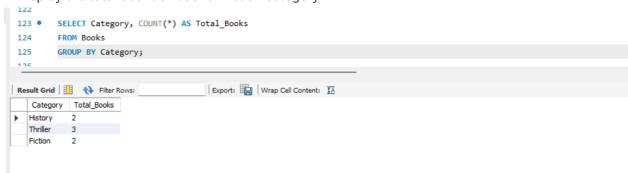
2. List the employee names and their respective salaries in descending order of salary.



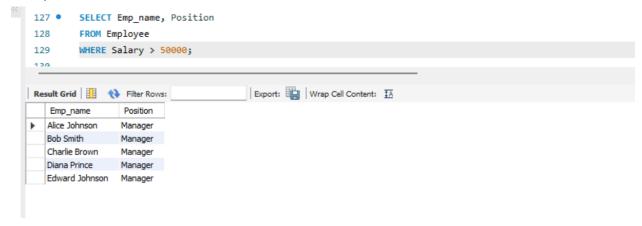
3. Retrieve the book titles and the corresponding customers who have issued those books.



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



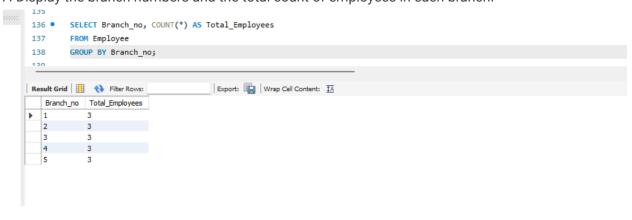
5. Retrieve the employee names and their positions for the employees whose salaries are above Rs.50,000.



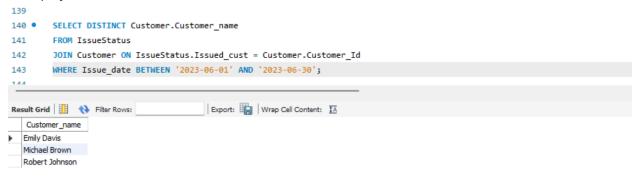
6. List the customer names who registered before 2022-01-01 and have not issued any books yet.



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



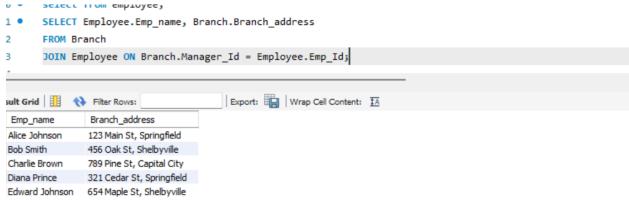
8. Display the names of customers who have issued books in the month of June



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 5 employees

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



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

