CREATE DATABASE library;

USE library;

CREATE TABLE Branch (

Branch\_no INT PRIMARY KEY,

Manager\_Id INT,

Branch\_address VARCHAR(100),

Contact\_no VARCHAR(20)

);

CREATE TABLE Employee (

Emp\_Id INT PRIMARY KEY,

Emp\_name VARCHAR(50),

Position VARCHAR(50),

Salary DECIMAL(10, 2),

FOREIGN KEY (Emp\_Id) REFERENCES Branch(Manager\_Id)

);

CREATE TABLE Customer (

Customer\_Id INT PRIMARY KEY,

Customer\_name VARCHAR(50),

Customer\_address VARCHAR(100),

Reg\_date DATE

);

CREATE TABLE IssueStatus (

Issue\_Id INT PRIMARY KEY,

Issued\_cust INT,

Issued\_book\_name VARCHAR(100),

Issue\_date DATE,

Isbn\_book VARCHAR(50),

FOREIGN KEY (Issued\_cust) REFERENCES Customer(Customer\_Id),

FOREIGN KEY (Isbn\_book) REFERENCES Books(ISBN)

);

CREATE TABLE ReturnStatus (

Return\_Id INT PRIMARY KEY,

Return\_cust INT,

Return\_book\_name VARCHAR(100),

Return\_date DATE,

Isbn\_book2 VARCHAR(50),

FOREIGN KEY (Return\_cust) REFERENCES Customer(Customer\_Id),

FOREIGN KEY (Isbn\_book2) REFERENCES Books(ISBN)

);

CREATE TABLE Books (

ISBN VARCHAR(50) PRIMARY KEY,

Book\_title VARCHAR(100),

Category VARCHAR(50),

Rental\_Price DECIMAL(10, 2),

Status ENUM('yes', 'no'),

Author VARCHAR(50),

Publisher VARCHAR(50)

);

INSERT INTO Branch (Branch\_no, Manager\_Id, Branch\_address, Contact\_no)

VALUES

(1001, 151, 'Palayam, Thiruvananthapuram', '987-654-3210'),

(1002, 152, ‘Kottarakkara, Kollam’, '987-654-3211'),

(1003, 153, ‘Aranmula, Pathanamthitta’, '987-654-3212'),

(1004, 154, ‘Ambalapuzha, Alappuzha’, '987-654-3213'),

(1005, 155, ‘Ramapuram, Kottayam, '987-654-3214'),

(1006, 156, ‘Vytilla, Ernakulam’, '987-654-3215'),

(1007, 157, ‘Ottapalam, Palakkad’, '987-654-3216'),

(1008, 158, ‘Nilambur, Malappuram’, '987-654-3217'),

(1009, 159, ‘, Kozhikode’, '987-654-3218'),

(1010, 160, ‘, Kasaragod’, '987-654-3219'),

(1011, 161, ‘, Kannur’, '987-654-3220'),

(1012, 162, ‘, Thrissur, '987-654-3221'),

(1013, 163, ‘, Wayanad, '987-654-3222'),

(1014, 164, ‘, Idukki, '987-654-3223');

INSERT INTO Employee (Emp\_Id, Emp\_name, Position, Salary)

VALUES

(151, ‘Resmi K S', ‘Librarian’, 67000.00),

(152, 'Mahesh A’, 'Assistant Librarian’, 43000.00),

(153, 'Latha A’, ‘Librarian’, 67000.00),

(154, ‘Santra L', ‘Librarian’, 67000.00),

(155, ‘Aneesh K’, 'Assistant Librarian’, 43000.00),

(156, ‘Banu S', ‘Librarian’, 67000.00),

(157, 'Charu R’, 'Assistant Librarian’, 43000.00),

(158, ‘Deepu G', ‘Librarian’, 67000.00),

(159, 'Eshan V’, 'Assistant Librarian’, 43000.00),

(160, ‘Farooq K’, ‘Librarian’, 67000.00),

(161, 'Gayathri A’, 'Assistant Librarian’, 43000.00),

(162, ‘Hari P', ‘Librarian’, 67000.00),

(163, 'Irshad T’, 'Assistant Librarian’, 43000.00),

(164, ‘Jeyanthi B', ‘Librarian’, 67000.00);

INSERT INTO Customer (Customer\_Id, Customer\_name, Customer\_address, Reg\_date)

VALUES

(11, 'Aliya', '123 XY St, City A', '2023-01-15'),

(12, 'Badra', '456 UV St, City B', '2023-02-20'),

(13, 'Chithra', ‘789 KL St , City C', '2023-03-10'),

(14, 'Greeshma', ‘789 KL St , City C', '2023-03-10'),

INSERT INTO IssueStatus (Issue\_Id, Issued\_cust, Issued\_book\_name, Issue\_date, Isbn\_book)

VALUES

(2001, 11, 'Book A', '2023-04-01', '978-1234567890'),

(2002, 12, 'Book B', '2023-04-02', '978-0987654321'),

(2003, 13, 'Book C', '2023-04-03', '978-9876543210'),

INSERT INTO ReturnStatus (Return\_Id, Return\_cust, Return\_book\_name, Return\_date, Isbn\_book2)

VALUES

(3001, 1001, 'Book A', '2023-04-10', '978-1234567890'),

(3002, 1002, 'Book B', '2023-04-12', '978-0987654321'),

(3003, 1003, 'Book C', '2023-04-15', '978-9876543210'),

INSERT INTO Books (ISBN, Book\_title, Category, Rental\_Price, Status, Author, Publisher)

VALUES

('978-1234567890', 'Book A', 'Fiction', 12.99, 'yes', 'John Author', 'Publisher X'),

('978-0987654321', 'Book B', 'Mystery', 10.99, 'yes', 'Jane Writer', 'Publisher Y'),

('978-9876543210', 'Book C', 'Science Fiction', 14.99, 'yes', 'Michael Novelist', 'Publisher Z'),

--#Q1

SELECT Book\_title, Category, Rental\_Price

FROM Books

WHERE Status = 'yes';

--#Q2

SELECT Emp\_name, Salary

FROM Employee

ORDER BY Salary DESC;

--#Q3

SELECT i.Issued\_book\_name AS Book\_Title, c.Customer\_name AS Customer\_Name

FROM IssueStatus i

JOIN Customer c ON i.Issued\_cust = c.Customer\_Id

JOIN Books b ON i.Isbn\_book = b.ISBN;

--#Q4

SELECT Category, COUNT(\*) AS Total\_Books

FROM Books

GROUP BY Category;

--#Q5

SELECT Emp\_name, Position

FROM Employee

WHERE Salary > 50000;

--#Q6

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

SELECT Customer\_name

FROM Customer

WHERE Reg\_date < '2022-01-01'

AND Customer\_Id NOT IN (

SELECT DISTINCT Issued\_cust

FROM IssueStatus

);

--#Q7

SELECT Branch\_no, COUNT(\*) AS Total\_Employees

FROM Employee

GROUP BY Branch\_no;

--#Q8

SELECT DISTINCT c.Customer\_name

FROM Customer c

JOIN IssueStatus i ON c.Customer\_Id = i.Issued\_cust

WHERE MONTH(i.Issue\_date) = 6 AND YEAR(i.Issue\_date) = 2023;

--#Q9

SELECT Book\_title

FROM Books

WHERE Category LIKE '%history%';

--#Q10

SELECT Branch\_no, COUNT(\*) AS Total\_Employees

FROM Employee

GROUP BY Branch\_no

HAVING COUNT(\*) > 5;