create database library;

use library;

create table branch

(branch\_no int primary key auto\_increment,

manager\_id int,

branch\_add varchar(50),

con\_no bigint);

alter table branch auto\_increment=1;

select \* from branch;

insert into branch(manager\_id,branch\_add,con\_no) values(15,'nitha',9034578912);

insert into branch(manager\_id,branch\_add,con\_no) values(102,'palakkadu',9038962012);

insert into branch(manager\_id,branch\_add,con\_no) values(103,'thiruvalla',9038990012),

(104,'trivandrum',9038990092),(105,'thrissur',9038789012);

update branch set branch\_add='kochi' where branch\_no=1005;

select \* from branch;

create table employee

(emp\_id int primary key auto\_increment,

emp\_name varchar(25) not null,

position varchar(30),

salary float,

branch\_no int,

foreign key (branch\_no) references branch (branch\_no));

alter table employee auto\_increment=10;

insert into employee(emp\_name,position,salary,branch\_no) values('sree','clerk',25000.0,1001);

insert into employee(emp\_name,position,salary,branch\_no) values('geetha','librarian',30000.0,1002),

('nidhi','staff',30000.0,1002),('gourav','librarian',30000.0,1003),('arnav','clerk',20000.0,1004);

insert into employee(emp\_name,position,salary,branch\_no) values('saran','manager',55000.0,1002);

insert into employee(emp\_name,position,salary,branch\_no) values('mrunal','librarian',55000.0,1002),

('midhuna','clerk',25000.0,1002),('ssabareesh','staff',20000.0,1002);

select \* from employee;

create table books

(isbn int primary key auto\_increment,

book\_title varchar(100),

category varchar(50),

rental\_price float,

status bool,

author varchar(50),

publisher varchar(100));

alter table books auto\_increment=5000;

alter table books modify column status int;

select \* from books;

create table customer

(customer\_id int primary key auto\_increment,

customer\_name varchar(20),

cust\_add varchar(100),

reg\_date date);

alter table customer auto\_increment=100;

insert into customer(customer\_name,cust\_add,reg\_date) values('aju','vaikkom','2021-01-13'),

('siju','attinkara','2021-06-13'),('sinu','mannarkkadu','2021-02-13'),

('gana','paadathil','2021-05-13');

insert into customer(customer\_name,cust\_add,reg\_date) values('amala','varkala','2023-06-13'),

('sini','shornur','2023-06-01'),('sibi','manjadikkadu','2023-06-30');

select \* from customer;

create table issuestatus

(issue\_id int primary key auto\_increment,

issued\_cust\_id int,

issued\_book\_name varchar(50),

issued\_date date,

isbn int,

foreign key(issued\_cust\_id) references customer(customer\_id),

foreign key(isbn) references books(isbn)

);

alter table issuestatus auto\_increment=200;

insert into issuestatus (issued\_cust\_id,issued\_book\_name,issued\_date,isbn)

values(110,'To Kill a Mockingbird','2023-06-04',5010),

(109,'The Alchemist','2023-06-028',5011);

insert into issuestatus (issued\_cust\_id,issued\_book\_name,issued\_date,isbn)

values(108,'The Immortal Life of Henrietta Lacks','2023-06-28',5013);

select \* from issuestatus;

create table returnstatus

(return\_id int primary key auto\_increment,

return\_date date,

return\_cust varchar(50),

return\_book\_name varchar(100),

isbn int,

foreign key(isbn) references books(isbn));

alter table returnstatus auto\_increment=400;

select \* from books;

insert into books (book\_title,category,rental\_price,status,author,publisher)

values('Harry Potter and the Philosophers Stone','Fantasy',19.99,1,'J.K. Rowling','Bloomsbury');

insert into books (book\_title,category,rental\_price,status,author,publisher)

values('Harry Potter and the Chamber of Secrets','Fantasy',19.99,0,'J.K. Rowling','Bloomsbury'),

('Brave New World','Dystopian',14.99,0,'Aldous Huxley','Harper Perennial'),

('To Kill a Mockingbird','Fiction',18.99,0,'Harper Lee','J.B. Lippincott & Co.'),

('The Alchemist','Fiction',16.99,0,'Paulo Coelho','HarperCollins')

;

insert into books (book\_title,category,rental\_price,status,author,publisher)

values('Sapiens: A Brief History of Humankind','History',22.99,1,'Yuval Noah Harari','Harper');

insert into books (book\_title,category,rental\_price,status,author,publisher)

values('The Immortal Life of Henrietta Lacks','History',25.99,0,'Rebecca Skloot','Crown Publishing Group');

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

select book\_title,category,rental\_price from books;

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

select emp\_name,salary from employee order by salary desc;

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

select i.issued\_book\_name,i.issued\_cust\_id,c.customer\_name

from issuestatus i inner join customer c on i.issued\_cust\_id=c.customer\_id;

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

select count(isbn) as count\_of\_books,category from books group by category;

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

select emp\_name,position from employee where salary>50000;

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

SELECT c.customer\_name

FROM customer c

LEFT JOIN issuestatus i ON c.customer\_id = i.issued\_cust\_id

WHERE c.reg\_date < '2022-01-01'

AND i.issued\_cust\_id IS NULL;

#7. Display the branch numbers and the total count of employees in each branch. (it is including manager)

select count(emp\_id),branch\_no from employee group by branch\_no;

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

select c.customer\_name from customer c

join issuestatus i on i.issued\_cust\_id=c.customer\_id

where issued\_date between '2023-06-01' and '2023-06-30';

#9. Retrieve book\_title from book table containing history.

select book\_title from books where category like '%history%';

#10.Retrieve the branch numbers along with the count of employees for branches having more than 5 employees

select branch\_no,count(emp\_id) from employee group by branch\_no having count(emp\_id)>5;

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

select b.branch\_no,b.branch\_add,e.emp\_name as manager\_name

from branch b join employee e on e.emp\_id=b.manager\_id;

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

select c.customer\_name from customer c

join issuestatus i on c.customer\_id=i.issued\_cust\_id

join books b on i.isbn=b.isbn

where b.rental\_price>25;