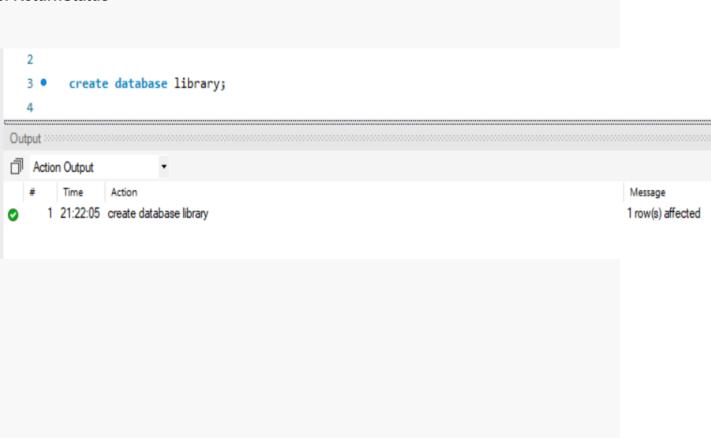
## **Topic: Library Management System**

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

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



```
Attributes for the tables:
1. Branch
           Branch_no - Set as PRIMARY KEY
           Manager_ld
           Branch address
           Contact no
    7 •
          use library;
   8
   9 • ⊖ create table braanch(branch_no int primary key,
  10
          manager_id int,
          branch_address varchar(25),
  11
          contact_no int);
  12
  13
  14 •
          select * from braanch;
   15
                                          | Edit: 🔏 📆 🖶 | Export/Import: 🏭 🐻 | Wrap Cell Content: 🖽
 manager_id
                         branch_address
                                       contact no
              NULL
                        NULL
                                      NULL
   15
           insert into braanch(branch_no,manager_id,branch_address,contact_no)
           values(1,111,'ckm',987654),
   17
   18
                 (2,222, 'abbc', 765432),
                 (3,333, "ekm", 543210),
   19
                 (4,444, 'bccd', 123456),
   20
                 (5,555, 'trvnrm', 235467),
   21
                 (6,666, 'kmmk', 345678);
   22
   23
   24
           select * from braanch;
                                          | Edit: 🔏 🖶 | Export/Import: 📳 🐻 | Wrap Cell Content: 🖽
  manager_id
                         branch_address
                                       contact_no
                                       987654
     1
               111
                         ckm
     2
               222
                         abbc
                                       765432
     3
               333
                         ekm
                                       543210
     4
              444
                         bccd
                                       123456
     5
                                       235467
               555
                         trvnrm
     6
              666
                         kmmk
                                       345678
    NULL
              NULL
                         NULL
                                      NULL
 braanch 3
  Output
```

### 2. Employee

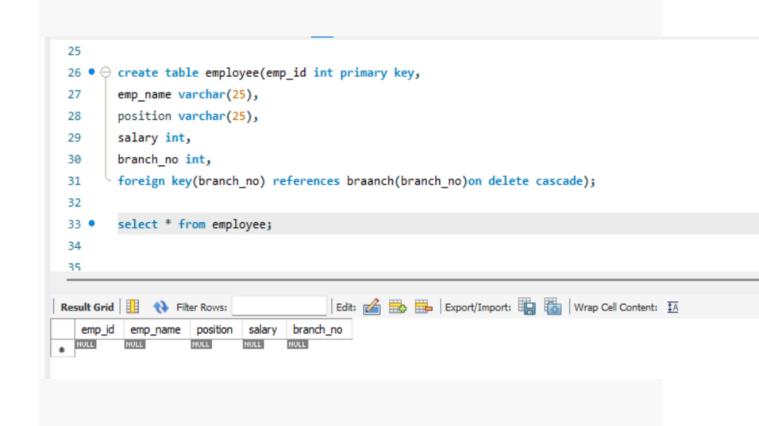
Emp\_ld - Set as PRIMARY KEY

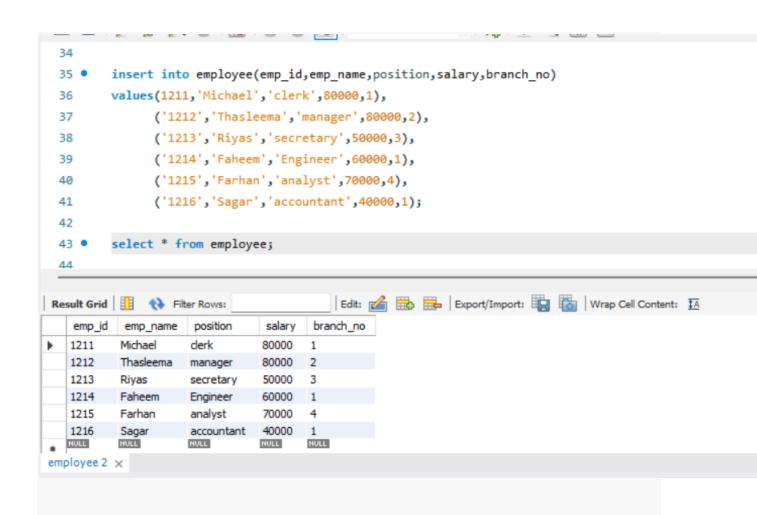
Emp\_name

**Position** 

Salary

Branch\_no - Set as FOREIGN KEY and it refer Branch\_no in Branch table





#### 3. Books

**ISBN - Set as PRIMARY KEY** 

**Book title** 

Category

**Rental Price** 

Status [Give yes if book available and no if book not available]

**Author** 

**Publisher** 

```
45 • ⊖ create table books(ISBN varchar(30) primary key,
 46
          book_title varchar(45),
 47
          category varchar(25),
 48
          rental price int,
          status enum("yes","no"),
 49
 50
          author varchar(25),
 51
          publisher varchar(30));
 52
          select * from books;
 53 •
 54
                                                 Edit: 🚄 🖶 Export/Import: 🏣 👸 Wrap Cell Content: 🔣
Result Grid
               Filter Rows:
          book title
                      category
                                rental price
                                             status
                                                     author
                                                              publisher
                     NULL
                               NULL
                                            NULL
                                                     NULL
                                                             NULL
  NULL
  54
           insert into books(ISBN,book title,category,rental price,status,author,publisher)
  55 •
          values('8975412092','into the wild','travelogue',20,'yes','john krakauer','Anchor'),
  56
                 ('7896045678', 'kappirikaluse nattil', 'travelogue', 14, 'yes', 's.k.pottakkad', 'dc books'),
  57
                 ('345678986', 'girl in room 105', 'novel',23, 'no', 'chethan bagat', 'westland books'),
  58
                 ('812643936X', 'Arachaar', 'fiction', 19, 'yes', 'k.r.meera', 'dc books'),
  59
                 ('8171301266', 'khasakkinte ithihasam', 'fiction', 18, 'yes', 'o.v.vijayan', 'dc books'),
  60
  61
                 ('4678432113', 'Adujeevitham', 'fiction', 17, 'yes', 'Benyamin', 'green books');
  62
          select * from books;
  63 •
  64
 Result Grid | Filter Rows:
                                              Edit: 🚄 🖶 Export/Import: 📳 👸 Wrap Cell Content: 🟗
    ISBN
                 book_title
                                    category
                                              rental_price
                                                          status
                                                                  author
                                                                                publisher
    345678986
                girl in room 105
                                   novel
                                                                 chethan bagat
                                                                               westland books
    4678432113
                Adujeevitham
                                   fiction
                                              17
                                                                 Benyamin
                                                                               green books
                                                          yes
    7896045678
                kappirikaluse nattil
                                   travelogue
                                              14
                                                                 s.k.pottakkad
                                                                               dc books
                                                          yes
                Arachaar
                                              19
                                                                               dc books
    812643936X
                                   fiction
                                                                 k.r.meera
                                                          yes
                khasakkinte ithihasam
                                                                               dc books
    8171301266
                                   fiction
                                               18
                                                                 o.v.vijayan
                                                          ves
                into the wild
                                              20
    8975412092
                                                                 john krakauer
                                                                               Anchor
                                   travelogue
                                                          yes
   NULL
                NULL
                                   NULL
                                              NULL
                                                         NULL
                                                                 NULL
                                                                               NULL
books 4 🗶
```

# 4. Customer Customer\_Id - Set as PRIMARY KEY Customer\_name Customer\_address Reg\_date 65 • ⊖ create table customer(customer\_id int primary key, customer\_name varchar(25), customer\_address varchar(100), 67 reg\_date date); 68 select \* from customer; 70 • 71 | Edit: 🚣 📆 🖶 | Export/Import: 📳 🐻 | Wrap Cell Content: 🔣 customer\_id customer\_name customer\_address reg\_date

```
/1
 72 •
         insert into customer(customer_id,customer_name,customer_address,reg_date)
 73
         values(1,'Emmi','ckm','2020-02-09'),
               (2, 'jacson', 'abbc', '2021-01-02'),
 74
               (3, 'Fheem', "ekm", '2023-05-04'),
 75
 76
               (4, 'Ayham', 'bccd', '2020-11-11'),
               (5, 'muhammed', 'trvnrm', '2021-06-04'),
 77
               (6, 'Riyaz', 'kmmk', '2023-12-02');
 78
 79
         select * from customer;
 80 •
 81
Edit: 🚄 🖶 Export/Import: 🏭 👸 Wrap Cell Content: 🖽
   customer_id
              customer_name
                             customer_address
                                           reg_date
   1
              Emmi
                                            2020-02-09
                            abbc
                                            2021-01-02
   2
              jacson
                                            2023-05-04
   3
              Fheem
                            ekm
              Ayham
                            bccd
                                            2020-11-11
                                            2021-06-04
   5
              muhammed
                            trvnrm
                                            2023-12-02
              Riyaz
                            kmmk
              NULL
                            NULL
  NULL
customer 1 ×
```

#### 5. IssueStatus

Issue\_Id - Set as PRIMARY KEY

Issued\_cust – Set as FOREIGN KEY and it refer customer\_id in CUSTOMER table Issued\_book\_name

Issue date

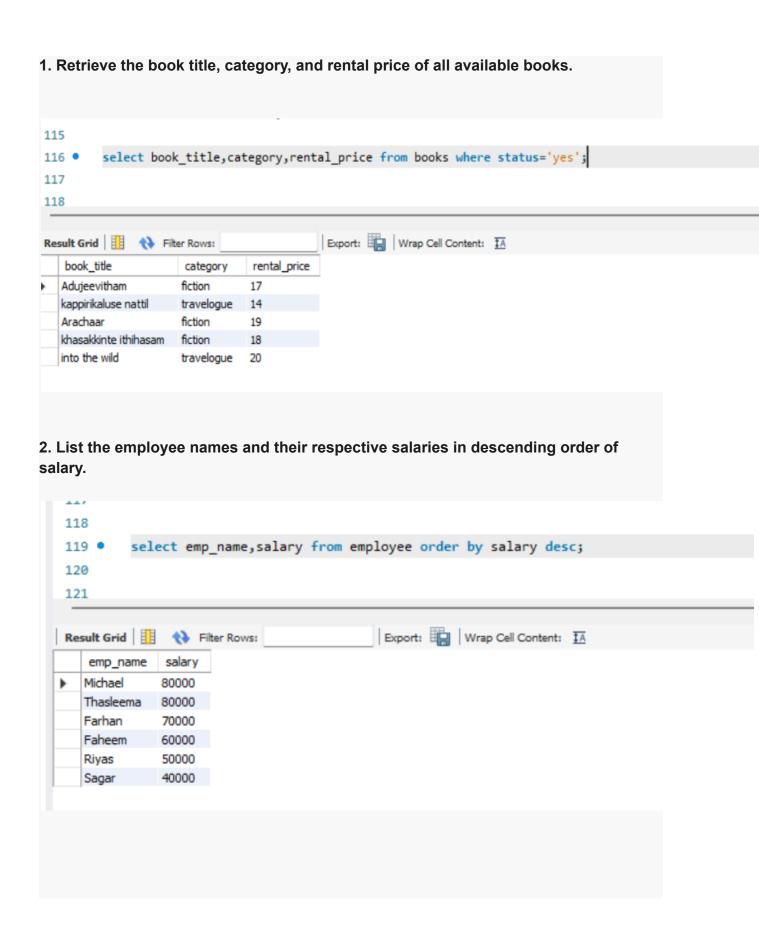
Isbn\_book – Set as FOREIGN KEY and it should refer isbn in BOOKS table

```
81
 82 • ⊖ create table issuestatus(issue_id int primary key,
        issued cust int,
 83
        foreign key (issued cust) references customer(customer id) on delete cascade,
 84
 85
        issued book name varchar(30),
 86
        issued date date,
        ISBN book varchar(30),
 87
 88
        foreign key(ISBN_book) references books(ISBN) on delete cascade);
 89
        select * from issuestatus;
 90 •
 91
                                        Edit: 🚄 🖶 🖶 Export/Import: 🏣 📸 Wrap Cell Content: 🖽
issue_id issued_cust issued_book_name issued_date ISBN_book
NULL
                                    NULL
                                               NULL
 91
         insert into issuestatus(issue id,issued cust,issued book name,issued date,isbn book)
 92 •
         values(100,1,'kappirikaluse nattil','2021-09-08','7896045678'),
 93
               (101,2,'Adujeevitham','2021-11-12','4678432113'),
 94
               (102,3,'khasakkinte ithihasam','2022-03-07','8171301266'),
 95
               (103,4, 'Arachaar', '2021-06-05', '812643936X'),
 96
               (104,5, 'girl in room 105', '2023-04-01', '345678986');
 97
 98
         select * from issuestatus;
 99 •
                                         Edit: 🔏 📆 🖶 Export/Import: 📳 🐻 Wrap Cell Content: 🛂
issue_id
           issued_cust issued_book_name
                                        100
           1
                      kappirikaluse nattil
                                       2021-09-08
                                                  7896045678
           2
   101
                      Adujeevitham
                                       2021-11-12
                                                  4678432113
   102
                      khasakkinte ithihasam
                                                  8171301266
           3
                                       2022-03-07
           4
   103
                      Arachaar
                                       2021-06-05 812643936X
   104
                      girl in room 105
                                       2023-04-01
                                                  345678986
          NULL
                     NULL
  NULL
                                       NULL
                                                  NULL
```

```
6. ReturnStatus
          Return_Id - Set as PRIMARY KEY
          Return_cust
          Return_book_name
          Return date
          Isbn_book2 - Set as FOREIGN KEY and it should refer isbn in BOOKS table
 100
 101 • ⊖ create table returstatus(return_id int primary key,
 102
         return_cust varchar(30),
 103
```

```
return_book_name varchar(45),
104
         return_date date,
105
         isbn_book2 varchar(20),
106
         foreign key(isbn_book2) references books(isbn) on delete cascade);
107
108 •
         insert into returstatus
109
         values(1000, 'Fawaz', 'khasakkinte ithihasam', '2023-08-11', '8171301266'),
110
               (1001, 'Ayham', 'girl in room 105', '2023-01-01', '345678986'),
111
               (1002, 'Aswin', 'Adujeevitham', '2023-02-02', '4678432113'),
               (1003, 'John', 'into the wild', '2022-12-12', '8975412092');
112
113
114 •
         select * from returstatus;
 115
Edit: 🚰 📆 🖺 Export/Import: 🗐 👸 Wrap Cell Content: 🖽
```

	return_id	return_cust	return_book_name	return_date	isbn_book2
•	1000	Fawaz	khasakkinte ithihasam	2023-08-11	8171301266
	1001	Ayham	girl in room 105	2023-01-01	345678986
	1002	Aswin	Adujeevitham	2023-02-02	4678432113
	1003	John	into the wild	2022-12-12	8975412092
	NULL	NULL	NULL	NULL	NULL
*				NULL	



3. Retrieve the book titles and the corresponding customers who have issued those books. 120 121 select i.issued\_book\_name,c.customer\_name from issuestatus i join customer c 122 • 123 on i.issued\_cust=c.customer\_id; 124 Export: Wrap Cell Content: IA Result Grid Filter Rows: issued\_book\_name customer\_name kappirikaluse nattil Emmi Adujeevitham jacson khasakkinte ithihasam Fheem Arachaar Ayham girl in room 105 muhammed 4. Display the total count of books in each category. 121 select category,count(category) as count from books 122 • group by category; 123 124 125 Export: Wrap Cell Content: IA category count novel 1 fiction 3 travelogue 2

5. Retrieve the employee names and their positions for the employees whose salaries are above Rs.50,000. 125 select emp\_name,position from employee where salary > 50000; 126 • 127 Export: Wrap Cell Content: TA Result Grid Filter Rows: emp\_name position Michael derk Thasleema manager Faheem Engineer Farhan analyst 6. List the customer names who registered before 2022-01-01 and have not issued any books yet. 132 133 select c.customer\_name,c.reg\_date from customer c left join issuestatus 134 • i on c.customer\_id=i.issued\_cust where c.reg\_date<'2022-01-01' and 135 i.issued cust is null; 136 137 Export: Wrap Cell Content: IA customer\_name | reg\_date

