

```

1  #mysql Comprehensive Assessment
2  • create database library;
3  • use library;
4  • create table Branch(
5      branch_no int primary key,
6      manager_id int,
7      branch_address varchar(50),
8      contact_no int);
9
10 • create table employee(
11     employee_id int primary key,
12     employee_name varchar(30),
13     position varchar(30),
14     salary int,
15     branch_no int,
16     foreign key (branch_no) references branch(branch_no));
17
18 • create table books(
19     isbn int(15) primary key,
20     book_title varchar(40),
21     category varchar(30),
22     rental_price int,
23     status char(5),
24     author varchar(30),
25     publisher varchar(30));
26
27 • create table customer(
28     customer_id int primary key,
29     customer_name varchar(30),
30     customer_address varchar(50),
31     reg_date date);
32
33 • create table issueStatus(
34     issue_id int primary key,
35     issued_cust int,
36     issued_book_name varchar(30),
37     issue_date date,
38     isbn_book int,
39     foreign key (issued_cust) references customer(customer_id),
40     foreign key (isbn_book) references books(isbn));
41
42 • create table return_status(
43     return_id int primary key,
44     return_cust int,
45     return_book_name varchar(30),
46     return_date date,
47     isbn_book2 int,
48     foreign key (isbn_book2) references books(isbn));
49
50 delimiter #
51 • create procedure branch_values(in b_no int,in m_id int,in b_addr varchar(50),in conta int)
52 begin
53     insert into branch values(b_no,m_id,b_addr,conta);
54 end #
55 delimiter ;
56
57 • call branch_values(100,1,'thrissur,eastfort',956487247);
58 • call branch_values(101,2,'kochi,ernakulam',45746531);
59 • call branch_values(102,3,'ottappalam,palakkad',16933522);
60 • call branch_values(103,4,'manjeri,malapuram',854665621);
61 • call branch_values(104,5,'payyannur,kannur',796611222);
62 • call branch_values(105,6,'punalur,kollam',956478224);
63
64
65 delimiter #
66 • create procedure employee_values(in emp_id int,in emp_name varchar(30),in pos varchar(30),in sala int,in b_no int)
67 begin
68     insert into employee values(emp_id,emp_name,pos,sala,b_no);
69 end #
70 delimiter ;
71
72 • call employee_values(1000,'Sudhakaran','manager',70000,100);
73 • call employee_values(1001,'Subhash','library technician',35000,100);
74 • call employee_values(1002,'Meera','library director',60000,101);
75 • call employee_values(1003,'Anuchand','Assistant',40000,101);
76 • call employee_values(1004,'Sreeram','Manager',70000,102);
77 • call employee_values(1005,'Anurag','technical assistant',30000,102);
78 • call employee_values(1006,'Antony','Accounting',54000,103);
79 • call employee_values(1007,'Beena','Junior manager',60000,104);
80 • call employee_values(1008,'Reena','Library assistant',30000,104);
81 • call employee_values(1009,'Rahul','Librarian',45000,104);
82 • call employee_values(1010,'Nelson','Director',75000,104);
83 • call employee_values(1011,'Vibesh','Librarian',35000,105);
84 • call employee_values(1012,'Aswathy','Manager',60000,105);
85 • call employee_values(1013,'Reena','Library assistant',30000,105);
86 • call employee_values(1014,'Roy','Library assistant',30000,105);
87 • call employee_values(1015,'Kumar','Library assistant',30000,105);
88 • call employee_values(1016,'Raghav','Library assistant',30000,105);
89

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86 delimiter #
87 • create procedure book_values(in isbn int,in b_title varchar(30),in cat varchar(30),in r_price int,in stat char,in auth varchar(30),in pub varchar(30))
88 begin
89     insert into books values(isbn,b_title,cat,r_price,stat,auth,pub);
90 end #
91 delimiter ;
92
93
94 • call book_values('454614226','Adujeevitham','Novel','35','y','Benjamin','Penguin Books');
95 • call book_values('497956232','Randamoozhm','Novel','50','y','M T Vasudevan nair','Current Books');
96 • call book_values('1258893623','The Alchemist','Adventure','40','y','Paulo Coelho','HarperCollins Publishers');
97 • call book_values('473662323','Oru Desathinte Katha','Fiction','40','y','SK Pottakadu','Current Books');
98 • call book_values('46332631','Arachar','Novel','20','n','KR Meera','Current Books');
99 • call book_values('165321233','You Are Born To Blossom','Inspiration and Guidance','30','n','APJ Abdul Kalam','Current Books');
100

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101
102 • delimiter #
103 • create procedure customer_values(in c_id int,in c_name varchar(30),in c_addr varchar(50),in r_date date)
104 begin
105     insert into customer values(c_id,c_name,c_addr,r_date);
106 end #
107 delimiter ;
108
109 • call customer_values(10,'Shifana','thrissur','2020-06-22');
110 • call customer_values(11,'Alwin','Kochi','2021-02-20');
111 • call customer_values(12,'Sukanya','Palakkad','2020-12-20');
112 • call customer_values(13,'Dileesh','Malapuram','2023-01-20');
113 • call customer_values(14,'Sudhi','Kannur','2021-05-25');
114 • call customer_values(15,'Anand','Kannur','2021-05-25');
115 • call customer_values(16,'Jyotsana','thrissur','2020-12-15');
116 • call customer_values(17,'Lithin','Palakkad','2021-08-14');
117

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121
122 • delimiter #
123 • create procedure issuestatus_values(in is_id int,in is_c int,in is_b_n varchar(30),in is_date date,in isbn int)
124 begin
125     insert into issueStatus values(is_id,is_c,is_b_n,is_date,isbn);
126 end #
127 delimiter ;
128
129 • call issuestatus_values(1,10,'Adujeevitham','2023-06-20','454614226');
130 • call issuestatus_values(2,11,'Randamoozhm','2023-06-15','497956232');
131 • call issuestatus_values(3,12,'The Alchemist','2023-06-10','1258893623');
132 • call issuestatus_values(4,13,'Oru Desathinte Katha','2023-12-15','473662323');
133 • call issuestatus_values(5,14,'Arachar','2023-05-12','46332631');
134 • call issuestatus_values(6,15,'Adujeevitham','2023-07-20','454614226');
135 • call issuestatus_values(7,16,'Arachar','2023-06-22','46332631');
136 • call issuestatus_values(8,17,'The Alchemist','2023-08-25','1258893623');
137

```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Contents: |

branch_no	manager_id	branch_address	contact_no
0			
100	1	thrissur,eastfort	956487247
101	2	kochi,emakulam	45746531
102	3	ottappalam,palakkad	16933522
103	4	marjeri,malapuram	854665821
104	5	payyanur,kannur	796611222
105	6	punalur,kolam	956478224

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Contents: | Fetch rows: |

employee_id	employee_name	position	salary	branch_no
1000	Sudhakaran	manager	70000	100
1001	Subhash	library technician	35000	100
1002	Meera	library director	80000	101
1003	Anuchand	Assistant	40000	101
1004	Sreeram	Manager	70000	102
1005	Anurag	technical assistant	30000	102
1006	Antony	Accounting	54000	103
1007	Beena	Junior manager	60000	104
1008	Reema	Library assistant	30000	104
1009	Rahul	Librarian	45000	104

branch 1 employee 2 x books 3 customer 4 issueStatus 5 return_status 6

Apply Revert

isbn	book_title	category	rental_price	status	author	publisher
46332631	Arachar	Novel	20	y	KR Meera	Current Books
165321233	You Are Born To Blossom	Inspiration and Guidance	30	n	APJ Abdul Kalam	Current Books
454614226	Adujeevitham	Novel	35	y	Benyamin	Penguin Books
473662323	Oru Desathinte Katha	Fiction	40	y	SK Pottakadu	Current Books
497956232	Randomoozhom	Novel	50	y	M T Vasudevan nair	Current Books
1258893623	The Alchemist	Adventure	40	y	Paulo Coelho	HarperCollins Publishers

customer_id	customer_name	customer_address	reg_date
10	Shifana	thrissur	2020-06-22
11	Alwin	Kochi	2021-02-20
12	Sulanya	Palakkad	2020-12-20
13	Dileesh	Malapuram	2022-01-20
14	Sudhi	Kannur	2021-05-25
15	Anand	Kannur	2021-05-25
16	Jyotsana	thrissur	2020-12-15
17	Lithin	Palakkad	2021-08-14

issue_id	issued_cust	issued_book_name	issue_date	isbn_book
1	10	Adujeevitham	2023-06-20	454614226
2	11	Randomoozhom	2023-06-15	497956232
3	12	The Alchemist	2023-06-10	1258893623
4	13	Oru Desathinte Katha	2023-12-15	473662323
5	14	Arachar	2023-05-12	46332631
6	15	Adujeevitham	2023-07-20	454614226
7	16	Arachar	2023-06-22	46332631
8	17	The Alchemist	2023-08-25	1258893623

return_id	return_cust	return_book_name	return_date	isbn_book2
1	10	Adujeevitham	2023-07-25	454614226
2	11	Randomoozhom	2023-07-25	497956232
3	12	The Alchemist	2023-07-20	1258893623
4	13	Oru Desathinte Katha	2023-12-31	473662323
5	14	Arachar	2023-06-12	46332631
6	15	Adujeevitham	2023-08-20	454614226
7	16	Arachar	2023-07-22	46332631
8	17	The Alchemist	2023-09-25	1258893623

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161 #1. Retrieve the book title, category, and rental price of all available books.
162
163 select book_title,category,rental_price from books where status='y';

```

book_title	category	rental_price
Arachar	Novel	20
Adujeevitham	Novel	35
Oru Desathinte Katha	Fiction	40
Randomoozhom	Novel	50
The Alchemist	Adventure	40

164

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

166

167 • `select employee_name,salary from employee order by salary desc;`

employee_name	salary
Meera	80000
Nelson	75000
Sudhakaran	70000
Sreeram	70000
Beena	60000
Aswathy	60000
Antony	54000
Rahul	45000
Anuchand	40000
Subhash	35000

168

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

170

171 • `select issuestatus.issued_book_name,customer.customer_name from issuestatus inner join customer on`

172 `issuestatus.issued_cust=customer.customer_id;`

issued_book_name	customer_name
Adujevitham	Shfana
Randamoodham	Alwin
The Alchemist	Sukanya
Oru Desathinte Katha	Dileesh
Arachar	Sudhi
Adujevitham	Anand
Arachar	Jyotsana
The Alchemist	Lithin

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

175 • `select category,count(category) from books group by category;`

category	count(category)
Novel	3
Inspiration and Guidance	1
Fiction	1
Adventure	1

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

178

179 • `select employee_name,position,salary from employee where salary>50000;`

employee_name	position	salary
Sudhakaran	manager	70000
Meera	library director	80000
Sreeram	Manager	70000
Antony	Accounting	54000
Beena	Junior manager	60000
Nelson	Director	75000
Aswathy	Manager	60000

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

182

183 • `select customer_name from customer where reg_date < '2022-01-01' and customer_id not in (select issued_cust from issuestatus);`

184 `#everybody in customer is issued books.....`

customer_name

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

187

188 • `select branch_no,count(branch_no) from employee group by branch_no;`

branch_no	count(branch_no)
100	2
101	2
102	2
103	1
104	4
105	6

```

190 #8. Display the names of customers who have issued books in the month of June 2023.
191
192 • select customer.customer_name,issuestatus.issue_date from issuestatus inner join customer
193 on issuestatus.issued_cust=customer.customer_id where month(issue_date)=06 and year(issue_date)=2023;

```

customer_name	issue_date
Shifana	2023-06-20
Alwin	2023-06-15
Sukanya	2023-06-10
Jyotsana	2023-06-22

```

195 #9. Retrieve book_title from book table containing history.
196
197 • select books.book_title,issuestatus.issue_date as history from books left join issuestatus on books.isbn=issuestatus.isbn_book;
198
199
200

```

book_title	history
Arachar	2023-05-12
Arachar	2023-06-22
You Are Born To Blossom	2023-06-20
Adujeevitham	2023-06-20
Adujeevitham	2023-07-20
Oru Desathinte Katha	2023-12-15
Randomoozhom	2023-06-15
The Alchemist	2023-06-10
The Alchemist	2023-08-25

```

198
199 #10.Retrieve the branch numbers along with the count of employees for branches having more than 5 employees
200
201 • select branch_no,count(branch_no) as br_no from employee group by branch_no having br_no>5;
202
203

```

branch_no	br_no
105	6

```

203 #11. Retrieve the names of employees who manage branches and their respective branch addresses.
204
205
206 • select employee.employee_name,employee.position,branch.branch_address from employee left join branch
207 on employee.branch_no=branch.branch_no where position='manager';
208

```

employee_name	position	branch_address
Sudhakaran	manager	thirsur,eastfort
Sreeram	Manager	ottappalam,palakkad
Aswathy	Manager	punalur,kolam

```

209 # 12. Display the names of customers who have issued books with a rental price higher than Rs. 25.
210
211 • select customer.customer_name,issuestatus.issued_book_name,books.rental_price from customer inner join issuestatus inner join books
212 on customer.customer_id=issuestatus.issued_cust and issuestatus.isbn_book=books.isbn where rental_price>25;

```

customer_name	issued_book_name	rental_price
Shifana	Adujeevitham	35
Anand	Adujeevitham	35
Dileesh	Oru Desathinte Katha	40
Alwin	Randomoozhom	50
Sukanya	The Alchemist	40
Lithan	The Alchemist	40