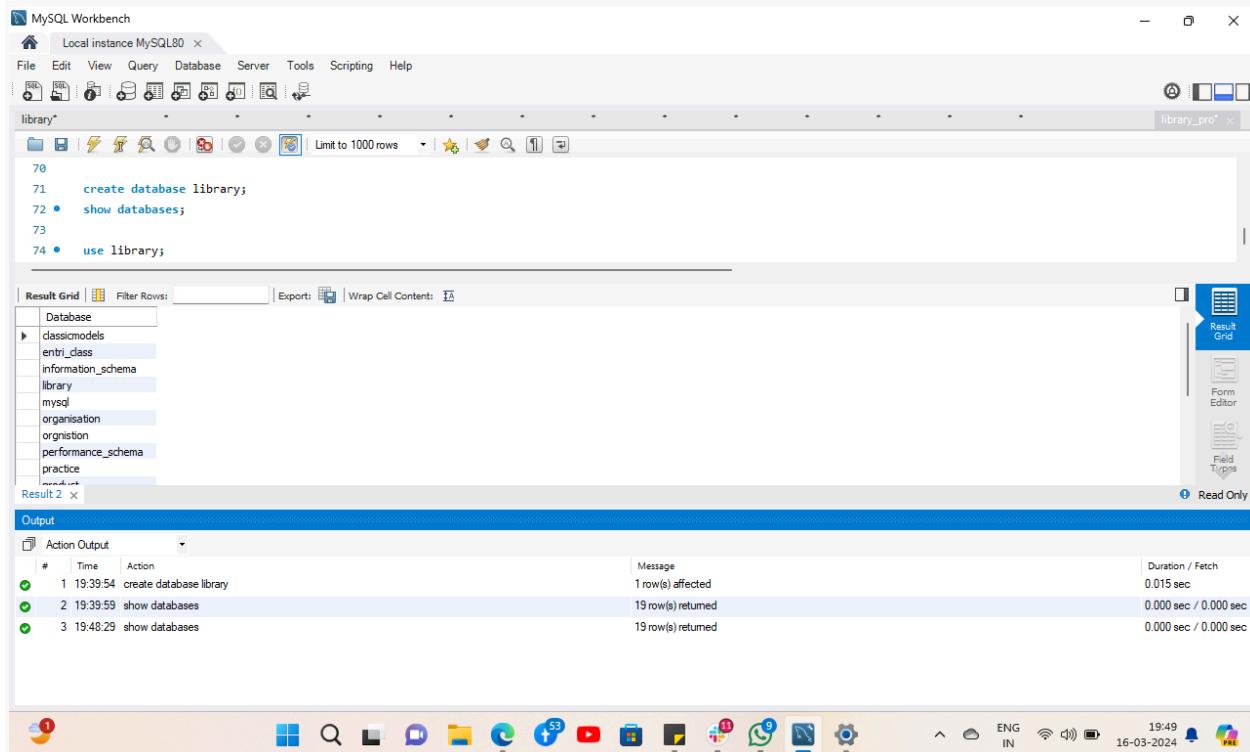


Topic : Library Management System

You are going to build a project based on Library Management System. It keeps track of all information about books in the library, their cost, status and total number of books available in the library.

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



The screenshot shows the MySQL Workbench interface. In the top-left pane, there is a code editor window with the following SQL commands:

```
70
71  create database library;
72 •  show databases;
73
74 •  use library;
```

In the bottom-left pane, the 'Result Grid' shows the list of databases on the system:

Database
classicmodels
entri_class
information_schema
library
mysql
organisation
orgnition
performance_schema
practice
test

In the bottom-right pane, the 'Output' tab displays the log of actions taken:

#	Time	Action	Message	Duration / Fetch
1	19:39:54	create database library	1 row(s) affected	0.015 sec
2	19:39:59	show databases	19 row(s) returned	0.000 sec / 0.000 sec
3	19:48:29	show databases	19 row(s) returned	0.000 sec / 0.000 sec

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_Id

Branch_address

Contact_no

The screenshot shows the MySQL Workbench interface with a query editor window. The query editor displays the SQL code for creating a table named 'branch'. The table has four columns: 'Branch_no' (int, primary key, not null), 'Manager_Id' (int, not null), 'Branch_address' (varchar(200)), and 'Contact_no' (varchar(20), unique). Below the code, the 'Result Grid' shows the table structure with columns Field, Type, Null, Key, Default, and Extra. The 'Action Output' section shows the history of database actions, including the creation of the 'library' database and the 'branch' table.

```
79 • create table branch
80   Branch_no int primary key not null,
81   Manager_Id int not null,
82   Branch_address varchar(200),
83   Contact_no varchar(20) unique;
```

Field	Type	Null	Key	Default	Extra
Branch_no	int	NO	PRI	NULL	
Manager_Id	int	NO		NULL	
Branch_address	varchar(200)	YES		NULL	
Contact_no	varchar(20)	YES	UNI	NULL	

Result 3 x

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:39:54	create database library	1 row(s) affected	0.015 sec
2	19:39:59	show databases	19 row(s) returned	0.000 sec / 0.000 sec
3	19:48:29	show databases	19 row(s) returned	0.000 sec / 0.000 sec
4	19:53:56	create table branch(Branch_no int primary key not null, Manager_Id int not null, Branch_address varchar(200), Contact_no varchar(20) unique);	0 row(s) affected	0.078 sec
5	19:54:01	desc branch	4 row(s) returned	0.000 sec / 0.000 sec

2. Employee

Emp_Id – Set as PRIMARY KEY

Emp_name

Position

Salary

Branch_no - Set as FOREIGN KEY and it refer Branch_no in Branch table

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

library* library_pro*

```

84
85 • desc branch;
86
87
88 # create table employee
89 • ⚡ create table employee(
90     Emp_Id int primary key not null,
91     Emp_name varchar(45),
92     Position varchar(45),
93     salary decimal(10,2),
94     Branch_no int,
95     foreign key(branch_no) references branch(branch_no);
96
97 • desc employee;
98
99

```

Output

Action Output	#	Time	Action	Message	Duration / Fetch
	2	19:39:59	show databases	19 row(s) returned	0.000 sec / 0.000 sec
	3	19:48:29	show databases	19 row(s) returned	0.000 sec / 0.000 sec
	4	19:53:56	create table branch(Branch_no int primary key not null, Manager_Id int not null, Branch_address varchar(45), Branch_name varchar(45), Branch_phone varchar(15), Branch_email varchar(50))	0 row(s) affected	0.078 sec
	5	19:54:01	desc branch	4 row(s) returned	0.000 sec / 0.000 sec
	6	20:38:22	create table employee(Emp_Id int primary key not null, Emp_name varchar(45), Position varchar(45), salary decimal(10,2), Branch_no int, foreign key(branch_no) references branch(branch_no));	0 row(s) affected	0.063 sec
	7	20:38:29	desc employee	5 row(s) returned	0.000 sec / 0.000 sec

20:38 16-03-2024 ENG IN

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

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

library*

```

95     foreign key(branch_no) references branch(branch_no);
96
97 • desc employee;
98
99 #create table books
100
101 • create table book(
102     ISBN varchar(45) primary key,
103     Book_title varchar(45),
104     Category varchar(45),
105     Rental_Price decimal(10,2),
106     Status enum('yes','no'),
107     Author varchar(45),
108     Publisher varchar(45));
109
110

```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
4	19:53:56	create table branch(Branch_no int primary key not null, Manager_Id int not null, Branch_address varchar(45))	0 row(s) affected	0.078 sec
5	19:54:01	desc branch	4 row(s) returned	0.000 sec / 0.000 sec
6	20:38:22	create table employee(Emp_Id int primary key not null, Emp_name varchar(45), Position varchar(45), sal...)	0 row(s) affected	0.063 sec
7	20:38:29	desc employee	5 row(s) returned	0.000 sec / 0.000 sec
8	20:49:13	create table books(ISBN varchar(45) primary key, Book_title varchar(45), Category varchar(45), Rental_...)	Error Code: 1050. Table books' already exists	0.000 sec
9	20:49:33	create table book(ISBN varchar(45) primary key, Book_title varchar(45), Category varchar(45), Rental_...)	0 row(s) affected	0.032 sec

ENG IN 20:49 16-03-2024

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

library*

```

108     Publisher varchar(45));
109
110
111 • desc book;
112

```

Result Grid

Field	Type	Null	Key	Default	Extra
ISBN	varchar(45)	NO	PRI	NULL	
Book_title	varchar(45)	YES		NULL	
Category	varchar(45)	YES		NULL	
Rental_Price	decimal(10,2)	YES		NULL	
Status	enum('yes','no')	YES		NULL	
Author	varchar(45)	YES		NULL	
Publisher	varchar(45)	YES		NULL	

Result 5

Action Output

#	Time	Action	Message	Duration / Fetch
5	19:54:01	desc branch	4 row(s) returned	0.000 sec / 0.000 sec
6	20:38:22	create table employee(Emp_Id int primary key not null, Emp_name varchar(45), Position varchar(45), sal...)	0 row(s) affected	0.063 sec
7	20:38:29	desc employee	5 row(s) returned	0.000 sec / 0.000 sec
8	20:49:13	create table books(ISBN varchar(45) primary key, Book_title varchar(45), Category varchar(45), Rental_...)	Error Code: 1050. Table books' already exists	0.000 sec
9	20:49:33	create table book(ISBN varchar(45) primary key, Book_title varchar(45), Category varchar(45), Rental_...)	0 row(s) affected	0.032 sec
10	20:50:23	desc book	7 row(s) returned	0.000 sec / 0.000 sec

ENG IN 20:50 16-03-2024

4. Customer

Customer_Id - Set as PRIMARY KEY

Customer_name

Customer_address

Reg_date

The screenshot shows the MySQL Workbench interface with two windows. The top window displays the SQL code for creating the 'customer' table:

```
113  
114  
115  
116 #create table customer  
117  
118 • create table customer(  
119     Customer_Id int primary key,  
120     Customer_name varchar(45),  
121     Customer_address varchar(200),  
122     Reg_date date  
123 );  
124  
125  
126  
127  
128
```

The bottom window shows the results of the 'desc customer;' command, displaying the table structure:

Field	Type	Null	Key	Default	Extra
Customer_Id	int	NO	PRI	NULL	
Customer_name	varchar(45)	YES		NULL	
Customer_address	varchar(200)	YES		NULL	
Reg_date	date	YES		NULL	

The status bar at the bottom right indicates the time as 20:53 and the date as 16-03-2024.

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

```

126
127  #create table issuestatus
128
129 • create table issuestatus(
130   Issue_Id int primary key,
131   Issued_cust int,
132   Issued_book_name varchar(45),
133   Issue_date date,
134   Isbn_book varchar(45),
135   foreign key (Issued_cust) references customer(customer_id),
136   FOREIGN KEY (isbn_book)references book(isbn));
137
138
139
140
141

```

Output

#	Time	Action	Message	Duration / Fetch
8	20:49:13	create table books(ISBN varchar(45) primary key, Book_title varchar(45), Category varchar(45), Rental_...	Error Code: 1050. Table 'books' already exists	0.000 sec
9	20:49:33	create table book(ISBN varchar(45) primary key, Book_title varchar(45), Category varchar(45), Rental_...	0 row(s) affected	0.032 sec
10	20:50:23	desc book	7 row(s) returned	0.000 sec / 0.000 sec
11	20:53:12	create table customer(Customer_Id int primary key, Customer_name varchar(45), Customer_address varc...	0 row(s) affected	0.063 sec
12	20:53:46	desc customer	4 row(s) returned	0.000 sec / 0.000 sec
13	21:00:28	create table issuestatus(Issue_Id int primary key, Issued_cust int, Issued_book_name varchar(45), Issue...	0 row(s) affected	0.094 sec

```

136 FOREIGN KEY (isbn_book)references book(isbn));
137
138
139 • desc issuestatus;
140

```

Result Grid

Field	Type	Null	Key	Default	Extra
Issue_Id	int	NO	PRI	NULL	
Issued_cust	int	YES	MUL	NULL	
Issued_book_name	varchar(45)	YES		NULL	
Issue_date	date	YES		NULL	
Isbn_book	varchar(45)	YES	MUL	NULL	

Result 7

Output

#	Time	Action	Message	Duration / Fetch
9	20:49:33	create table book(ISBN varchar(45) primary key, Book_title varchar(45), Category varchar(45), Rental_...	0 row(s) affected	0.032 sec
10	20:50:23	desc book	7 row(s) returned	0.000 sec / 0.000 sec
11	20:53:12	create table customer(Customer_Id int primary key, Customer_name varchar(45), Customer_address varc...	0 row(s) affected	0.063 sec
12	20:53:46	desc customer	4 row(s) returned	0.000 sec / 0.000 sec
13	21:00:28	create table issuestatus(Issue_Id int primary key, Issued_cust int, Issued_book_name varchar(45), Issue...	0 row(s) affected	0.094 sec
14	21:01:04	desc issuestatus	5 row(s) returned	0.000 sec / 0.000 sec

6. ReturnStatus

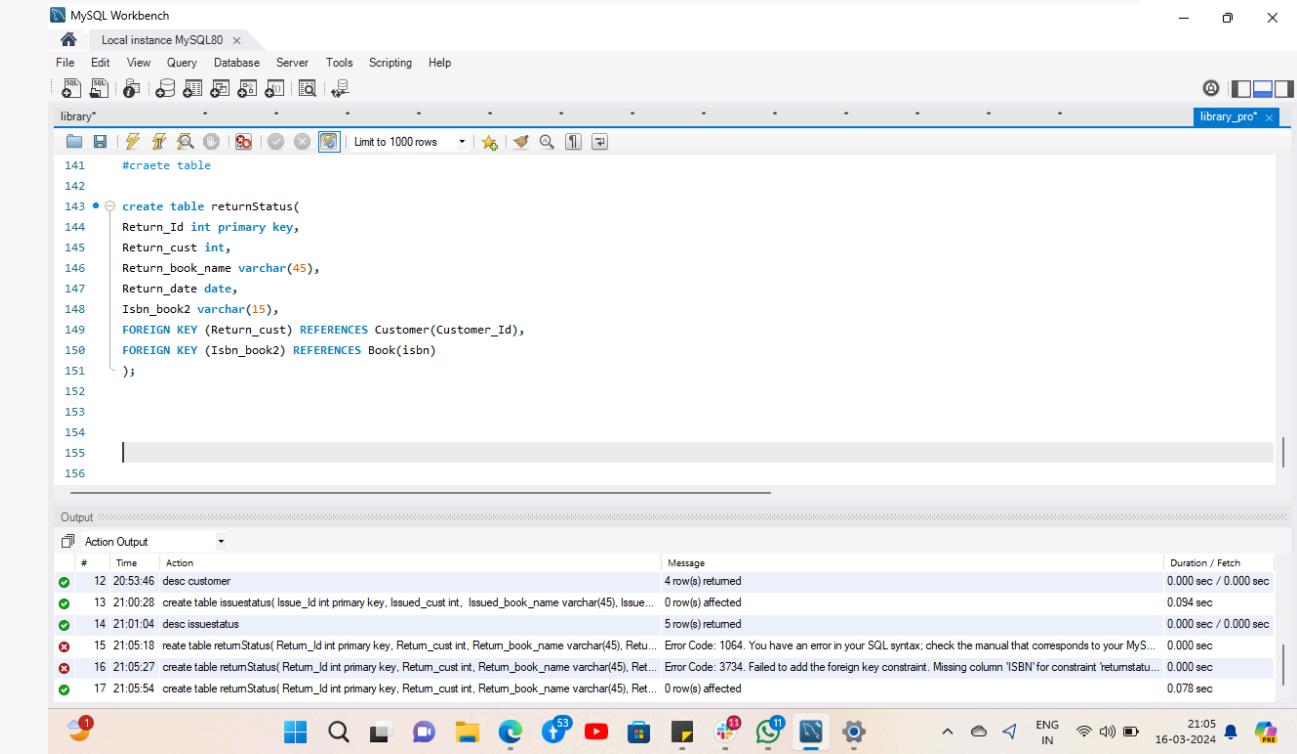
Return_Id - Set as PRIMARY KEY

Return_cust

Return_book_name

Return_date

isbn_book2 - Set as FOREIGN KEY and it should refer isbn in BOOKS table



The screenshot shows the MySQL Workbench interface with the following details:

SQL Editor:

```
141 #create table
142
143 • 1 create table returnStatus(
144     Return_Id int primary key,
145     Return_cust int,
146     Return_book_name varchar(45),
147     Return_date date,
148     Isbn_book2 varchar(15),
149     FOREIGN KEY (Return_cust) REFERENCES Customer(Customer_Id),
150     FOREIGN KEY (Isbn_book2) REFERENCES Book(isbn)
151 );
152
153
154
155
156
```

Output Window:

Action	Time	Action	Message	Duration / Fetch
12	20:53:46	desc customer	4 row(s) returned	0.000 sec / 0.000 sec
13	21:00:28	create table issuestatus(Issue_Id int primary key, Issued_cust int, Issued_book_name varchar(45), Issue...	0 row(s) affected	0.094 sec
14	21:01:04	desc issuestatus	5 row(s) returned	0.000 sec / 0.000 sec
15	21:05:18	create table returnStatus(Return_Id int primary key, Return_cust int, Return_book_name varchar(45), Retu...	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MyS...	0.000 sec
16	21:05:27	create table returnStatus(Return_Id int primary key, Return_cust int, Return_book_name varchar(45), Retu...	Error Code: 3734. Failed to add the foreign key constraint. Missing column 'ISBN' for constraint 'returnst...	0.000 sec
17	21:05:54	create table returnStatus(Return_Id int primary key, Return_cust int, Return_book_name varchar(45), Ret...	0 row(s) affected	0.078 sec

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

library*

150 FOREIGN KEY (Isbn_book2) REFERENCES Book(isbn)
151);
152
153 • desc returnStatus;
154

Result Grid | Filter Rows: Export: Wrap Cell Content: □

Field	Type	Null	Key	Default	Extra
Return_Id	int	NO	PRI	NULL	
Return_cust	int	YES	MUL	NULL	
Return_book_name	varchar(45)	YES		NULL	
Return_date	date	YES		NULL	
Isbn_book2	varchar(15)	YES	MUL	NULL	

Result 8 x

Action Output

#	Time	Action	Message	Duration / Fetch
13	21:00:28	create table issuestatus(Issue_Id int primary key, Issued_cust int, Issued_book_name varchar(45), Issue...)	0 row(s) affected	0.094 sec
14	21:01:04	desc issuestatus	5 row(s) returned	0.000 sec / 0.000 sec
15	21:05:18	create table returnStatus(Return_Id int primary key, Return_cust int, Return_book_name varchar(45), Retu...	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MySQL version for the right syntax to use near 'returnStatus(Return_Id int primary key, Return_cust int, Return_book_name varchar(45), Retu...' at line 1	0.000 sec
16	21:05:27	create table returnStatus(Return_Id int primary key, Return_cust int, Return_book_name varchar(45), Retu...	Error Code: 3734. Failed to add the foreign key constraint. Missing column 'ISBN' for constraint 'returnstatus_ibfk_1' in relation 'returnStatus'	0.000 sec
17	21:05:54	create table returnStatus(Return_Id int primary key, Return_cust int, Return_book_name varchar(45), Retu...	0 row(s) affected	0.078 sec
18	21:06:58	desc returnStatus	5 row(s) returned	0.000 sec / 0.000 sec

Display all the tables and Write the queries for the following :

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

library*

156
157 • insert into branch values(1,100,'mumbai',99999900),
158 (2,101,'kolkata',99886600),
159 (3,102,'kochi',99887766),
160 (4,103,'chennai',99778900),
161 (5,104,'banglore',88779900),
162 (6,105,'kochi',99995567),
163 (7,106,'chennai',77889900),
164 (8,107,'trivandrum',99994422),
165 (9,108,'calicut',99662200),
166 (10,109,'trivandrum',88224400);
167
168 • select * from branch;

Output ::

Action Output

#	Time	Action	Message	Duration / Fetch
15	21:05:18	create table returnStatus(Return_Id int primary key, Return_cust int, Return_book_name varchar(45), Retu...	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MySQL version for the right syntax to use near 'returnStatus(Return_Id int primary key, Return_cust int, Return_book_name varchar(45), Retu...' at line 1	0.000 sec
16	21:05:27	create table returnStatus(Return_Id int primary key, Return_cust int, Return_book_name varchar(45), Retu...	Error Code: 3734. Failed to add the foreign key constraint. Missing column 'ISBN' for constraint 'returnstatus_ibfk_1' in relation 'returnStatus'	0.000 sec
17	21:05:54	create table returnStatus(Return_Id int primary key, Return_cust int, Return_book_name varchar(45), Retu...	0 row(s) affected	0.078 sec
18	21:06:58	desc returnStatus	5 row(s) returned	0.000 sec / 0.000 sec
19	21:17:32	insert into branch values(1,100,'mumbai',99999900),(2,101,'kolkata',99886600),(3,102,'kochi',99887766)... 10 rows(s) affected Records: 10 Duplicates: 0 Warnings: 0	10 rows(s) returned	0.016 sec
20	21:17:32	select * from branch LIMIT 0, 1000	10 rows(s) returned	0.000 sec / 0.000 sec

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

library*

```

165   (9,108,'calicut',99662200),
166   (10,109,'trivandrum',88224400);
167
168 • select * from branch;
169
170
171
172
173

```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Contents: | Result Grid | Form Editor | Field Types | Query Stats

Branch_no	Manager_Id	Branch_address	Contact_no
1	100	mumbai	99999900
2	101	kolkata	99886600
3	102	kochi	99887766
4	103	chennai	99778900
5	104	banglore	88779900
6	105	kochi	995567
7	106	chennai	77889900
8	107	trivandrum	994422
9	108	calicut	99662200
10	109	trivandrum	88224400
*	HULL	HULL	HULL

branch 10 | Apply | Revert | 21:18 16-03-2024

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

library*

```

170 # insert values into table employee
171
172 • insert into employee values(500,'fera','librarian',10000.00,8),
173   (504,'ahana','cordinator',12000.00,5),
174   (506,'mosh','cataloger',20000.00,1),
175   (530,'max','library assistant',25000.00,2),
176   (534,'ram','cordinator',12000.00,6),
177   (520,'vismaya','library assistant',25000.00,4),
178   (518,'sanam','librarian',10000.00,3),
179   (518,'anas','cataloger',20000.00,9),
180   (522,'minha','cordinator',12000.00,5),
181   (501,'muneer','cataloger',20000.00,7),
182   (538,'feryal','librarian',10000.00,8),
183   (568,'samson','library assistant',25000.00,6),
184   (565,'john','cordinator',12000.00,1);
185

```

Action Output

#	Time	Action	Message	Duration / Fetch
18	21:06:58	desc returnStatus	5 row(s) returned	0.000 sec / 0.000 sec
19	21:17:32	insert into branch values(1,100,'mumbai',99999900), (2,101,kolkata',99886600), (3,102,kochi',99887766)... 10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0		0.016 sec
20	21:17:32	select *from branch LIMIT 0, 1000	10 row(s) returned	0.000 sec / 0.000 sec
21	21:18:19	select *from branch LIMIT 0, 1000	10 row(s) returned	0.000 sec / 0.000 sec
22	21:34:13	insert into employee values(500,fera','librarian',10000.00,8), (504,'ahana','cordinator',12000.00,5), (506,'... Error Code: 1062. Duplicate entry '534' for key 'employee.PRIMARY'		0.031 sec
23	21:34:51	insert into employee values(500,fera','librarian',10000.00,8), (504,'ahana','cordinator',12000.00,5), (506,'... 13 row(s) affected Records: 13 Duplicates: 0 Warnings: 0		0.015 sec

library_pro* | 21:35 16-03-2024

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

library*

```

180     ('522','minha','cordinator',12000.00,5),
181     ('501','muneer','cataloger',20000.00,7),
182     ('538','feryal','librarian',10000.00,8),
183     ('560','samson','library assistant',25000.00,6),
184     ('565','john','cordinator',12000.00,1);
185
186 • select * from employee;
187

```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Result Grid | Form Editor | Field Types | Query Stats | Apply | Revert |

Emp_Id	Emp_name	Position	salary	Branch_no
500	fera	librarian	10000.00	8
501	muneer	cataloger	20000.00	7
504	ahana	cordinator	12000.00	5
506	mosh	cataloger	20000.00	1
510	sanam	librarian	10000.00	3
518	anas	cataloger	20000.00	9
520	vismaya	library assistant	25000.00	4
522	minha	cordinator	12000.00	5
530	max	library assistant	25000.00	2
534	ram	cordinator	12000.00	6
538	feryal	librarian	10000.00	8
560	samson	library assistant	25000.00	6
565	john	cordinator	12000.00	1
*	NOTE	NOTE	NOTE	NOTE



employee 11 x

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

library*

```

207     ('ISBN13:978152','BECOMING','BIOGRAPHY',800,'YES','MICHELLE OBAMA','CROWN PUBLISHING'),
208     ('ISBN13:978055','A GAME OF THRONES','FANTASY',900,'YES','GEORGE R.R. MARTIN','BANTAM'),
209     ('ISBN:7803','THE HISTORY OF LOVE','HISTORY',400,'NO','NICOLE KRAUSS','W.W.NORTON&COMPANY'),
210     ('ISBN:781400','MY EXPERIMENT OF LIFE','AUTOBIOGRAPHY',600,'YES','GANDHI','NAVJIVAN'),
211     ('ISBN:87055','A BRIEF HISTORY','HISTORY',900,'YES','STEPHEN HAWKING','BANTAM');

213 • select * from Book;
214
215

```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Result Grid | Form Editor | Field Types | Query Stats | Apply | Revert |

ISBN	Book_title	Category	Rental_Price	Status	Author	Publisher
ISBN:7803	THE HISTORY OF LOVE	HISTORY	400.00	no	NICOLE KRAUSS	W.W.NORTON&COMPANY
ISBN:781400	MY EXPERIMENT OF LIFE	AUTOBIOGRAPHY	600.00	yes	GANDHI	NAVJIVAN
ISBN:87055	A BRIEF HISTORY	HISTORY	900.00	yes	STEPHEN HAWKING	BANTAM
ISBN:13:978-00623	SAPIENS	HISTORY	700.00	no	YUVAL NOAH HARARI	HARPER PERENNIAL
ISBN:13:978-006231	DRIVE	BUSINESS	300.00	no	DANIEL H.PINK	RIVERHEAD BOOKS
ISBN:13:978-03075	GONE GIRL	MYSTERY/THRILLER	250.00	yes	GILLIAN FLYNN	BROADWAY BOOKS
ISBN:13:978-04156	BOSSYPANTS	BIOGRAPHY	4500.00	no	TINA FEY	BACK BAY BOOKS
ISBN:13:978-04411	KAYAR	MALAYALAM NOVEL	500.00	yes	THAKAZHI	DC BOOKS
ISBN:13:978-04415	NEUROMANCER	SCIENCE FICTION	500.00	no	WILLIAM GIBSON	ACE BOOKS
ISBN:13:978-17130	HALF GIRLFRIEND	NOVEL	550.00	no	CHETAN BAGATHE	DC BOOKS
ISBN:13:978-81264	OZHICHUVIDUKA	FICTION	450.00	no	SARAH JOSEPH	DC BOOKS
ISBN:13:978-8165	NALLAVANNAM	FICTION	200.00	no	C.RADHAKRISHNAN	DC BOOKS
ISBN:13:978-81713	AAANKALOPILLI	FICTION	350.00	yes	O.V.VIJAYAN	DC BOOKS
ISBN:13:978006	THE ALCHEMIST	FICTION	800.00	no	PAULO COELHO	HARPERONE
ISBN:13:978030	THE DAVINCI CODE	MYSTERY/THRILLER	900.00	yes	DAN BROWN	ANCHOR
ISBN:13:978055	A GAME OF THRONES	FANTASY	900.00	yes	GEORGE R.R. MARTIN	BANTAM
ISBN:13:978059	HARRY POTTER	FANTASY	800.00	no	J.K.ROWLING	SCHOLASTIC INC



MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

220   (1207, 'CHINNU', 'HYDRABAD', '2022-12-23'),(1208, 'aysha', 'Chennai', '2023-01-11'),
221   (1209, 'mammy', 'Delhi', '2023-02-10'),(1210, 'dua', 'Kerala', '2023-05-30'),
222   (1211, 'amir', 'Kolkata', '2023-07-15'),(1212, 'alia', 'kolkata', '2023-09-23'),
223   (1213, 'saksha', 'Kerala', '2023-12-30'),(1214, 'aria', 'Chennai', '2024-01-08'),
224   (1215, 'Jwel', 'Mumbai', '2024-02-10'),(1216, 'fera', 'Delhi', '2024-02-20');
225
226 • select * from Customer;
227
228

```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Result Grid | Form Editor | Field Types | Query Stats | Apply

Customer_Id	Customer_name	Customer_address	Reg_date
1200	AFLA	Kerala	2021-05-11
1201	ROHIT	Karnataka	2021-10-22
1202	AISWARYA	Mumbai	2021-11-10
1203	MRDULA	kolkata	2021-12-22
1204	PRANAV	Kerala	2022-06-23
1205	RAVEEN	Delhi	2022-08-10
1206	Rajesh	Chennai	2022-10-27
1207	CHINNU	HYDRABAD	2022-12-23
1208	aysha	Chennai	2023-01-11
1209	mammy	Delhi	2023-02-10
1210	dua	Kerala	2023-05-30
1211	amir	Kolkata	2023-07-15
1212	alia	kolkata	2023-09-23
1213	saksha	Kerala	2023-12-30
1214	aria	Chennai	2024-01-08
1215	Jwel	Mumbai	2024-02-10
1216	fera	Delhi	2024-02-20

Customer 15 x

21:58 16-03-2024 ENG IN

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

230   (002,1202,'2022-07-13','ISBN13:978-006231'),(003,1210,'2022-11-01','ISBN13:978-04415'),
231   (004,1211,'2021-12-30','ISBN13:978-04156'),(005,1209,'2023-02-15','ISBN13:978-81264'),
232   (006,1209,'2023-01-05','ISBN13:978-8165'),(007,1205,'2024-02-15','ISBN13:978-81713'),
233   (008,1203,'2021-11-15','ISBN13:978-00623'),(009,1204,'2024-02-21','ISBN13:978-00623'),
234   (010,1211,'2023-01-02','ISBN13:978-04411'),(011,1206,'2023-01-30','ISBN13:978-03075'),
235   (012,1208,'2024-02-11','ISBN13:978-17130'),(013,1210,'2022-11-01','ISBN13:978-17130'),
236   (014,1207,'2024-02-21','ISBN13:978-04415'),(015,1205,'2023-10-15','ISBN13:978-04411'),
237   (016,1206,'2024-02-10','ISBN13:978-8165'),(017,1207,'2022-09-10','ISBN13:978-03075'),
238   (018,1206,'2023-06-06','ISBN13:978-04411'),(019,1205,'2023-06-10','ISBN13:978055'),
239   (020,1200,'2023-06-22','ISBN13:978547');
240
241 • select * from issuestatus;
242

```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Result Grid | Form Editor | Field Types | Query Stats | Apply | Revert

Issue_Id	Issued_cust	Issued_book_name	Issue_date	ISBN_book
1	1200	HULK	2021-11-15	ISBN13:978-04411
2	1202	HULK	2022-07-13	ISBN13:978-006231
3	1210	HULK	2022-11-01	ISBN13:978-04415
4	1211	HULK	2021-12-30	ISBN13:978-04156
5	1209	HULK	2023-02-15	ISBN13:978-81264
6	1209	HULK	2023-01-05	ISBN13:978-8165
7	1205	HULK	2024-02-15	ISBN13:978-81713
8	1203	HULK	2021-11-15	ISBN13:978-00623
9	1204	HULK	2024-02-21	ISBN13:978-00623
10	1211	HULK	2023-01-02	ISBN13:978-04411
11	1206	HULK	2023-01-30	ISBN13:978-03075
12	1208	HULK	2024-02-11	ISBN13:978-17130
13	1210	HULK	2022-11-01	ISBN13:978-17130
14	1207	HULK	2024-02-21	ISBN13:978-04415
15	1205	HULK	2023-10-15	ISBN13:978-04411

issuestatus 2 x

36°C Haze

21:58 17-03-2024 ENG IN

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

library_pro x

```

242
243 • select * from issuestatus;
244 • select * from customer;
245 • select * from book;
246 • desc returnstatus;
247 • insert into ReturnStatus values(200,'afla','KAYAR','2022-02-28','ISBN13:978-04411'),
248 (201,'mrduula','THE ALCHEMIST','2022-12-30','ISBN13:978-006231'),(203,'RAJESH','HALF GIRLFRIEND','2023-04-03','ISBN13:978-04415'),
249 (204,'praveen','THE DAVINCI CODE','2024-01-20','ISBN13:978-04156'),(205,'aysha','NEUROMANCER','2023-12-25','ISBN13:978-81264'),
250 (206,'amir','NALLAVANNAM','2023-06-30','ISBN13:978-8165'),(207,'saksha','AANAKKALLOPILLI','2024-02-22','ISBN13:978-81713'),
251 (208,'RAJESH','GONE GIRL','2022-11-08','ISBN13:978-00623'),(209,'pranav','KAYAR','2024-02-21','ISBN13:978-00623'),
252 (210,'alila','HALF GIRLFRIEND','2023-12-01','ISBN13:978-04411'),(211,'eria','GONE GIRL','2023-02-05','ISBN13:978-03075'),
253 (212,'AISHWARYA','A BRIEF HISTORY',2024-02-21,'ISBN13:978-17130'),(213,'chinmu','KAYAR',2023-03-07,'ISBN13:978-17130'),
254 (214,'dua','NEUROMANCER','2024-02-22','ISBN13:978-04415'),(215,'mammy','HARRY POTTER','2024-02-10','ISBN13:978-04411'),
255 (216,'fera','BECOMING','2024-02-22','ISBN13:978-8165'),(217,'jwel','GONE GIRL','2022-12-31','ISBN13:978-03075'),
256 (218,'fera','BOSSYPANTS','2023-10-22','ISBN13:978-04411);
257
258 • select * from ReturnStatus;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Result Grid | Form Editor | Revert | Apply |

Return_Id	Return_cust	Return_book_name	Return_date	Isbn_book2
200	afla	KAYAR	2022-02-28	ISBN13:978-04411
201	mrduula	THE ALCHEMIST	2022-12-30	ISBN13:978-006231
203	RAJESH	HALF GIRLFRIEND	2023-04-03	ISBN13:978-04415
204	praveen	THE DAVINCI CODE	2024-01-20	ISBN13:978-04156
205	aysha	NEUROMANCER	2023-12-25	ISBN13:978-81264
206	amir	NALLAVANNAM	2023-06-30	ISBN13:978-8165
207	saksha	AANAKKALLOPILLI	2024-02-22	ISBN13:978-81713
208	RAJESH	GONE GIRL	2022-11-08	ISBN13:978-00623
209	pranav	KAYAR	2024-02-21	ISBN13:978-00623

ReturnStatus 11 x

14:21 17-03-2024 ENG IN

1:examine what population in database has,how many rows are present in each table

MySQL Workbench

Local instance MySQL80 x unconnected x

File Edit View Query Database Server Tools Scripting Help

library_pro x

```

257
258 • select * from ReturnStatus;
259
260 #examine what the population of database has.how many rows are present in each table
261
262 • select 'BRANCH' as 'table',count(*) as 'num_rows' from BRANCH
263 union
264 select 'employee' as 'table',count(*)as 'num_rows' from employee
265 union
266 select 'customer' as 'table',count(*) as 'num_rows' from customer
267 union
268 select 'issuestatus' as 'table',count(*) as 'num_rows' from issuestatus
269 union
270 select 'returnstatus' as 'table',count(*) as 'num_rows' from returnstatus
271 union
272 select 'book' as 'table',count(*) as 'num_rows' from book;
273
274
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Result Grid | Form Editor | Revert | Read Only |

table	num_rows
BRANCH	10
employee	13
customer	17
issuestatus	20
returnstatus	18
book	21

Result 12 x

Query Completed

14:27 17-03-2024 ENG IN

MySQL Workbench

Local instance MySQL80 × unconnected ×

File Edit View Query Database Server Tools Scripting Help

library_pro* ×

```

270 select 'returnstatus' as 'table',count(*) as 'num_rows' from returnstatus
271 union
272 select 'book' as 'table',count(*) as 'num_rows' from book;
273
274
275
276
277
278 # examine details of books and category which involves in library
279
280 • select distinct book_title as book_title,category from book;
281
282

```

Result Grid | Filter Rows: Export: Wrap Cell Content:

book_title	category
THE HISTORY OF LOVE	HISTORY
MY EXPERIMENT OF LIFE	AUTOBIOGRAPHY
A BRIEF HISTORY	HISTORY
APIENS	HISTORY
DRIVE	BUSINESS
GONE GIRL	MYSTERY/THRILLER
BOSSYPANTS	BIOGRAPHY
KAYAR	MALAYALAM NOVEL
NEUROMANCER	SCIENCE FICTION
HALF GIRLFRIEND	NOVEL
OZHICHUVUDKA	FICTION
NALLAVANNAM	FICTION
AAANKALLOPILLI	FICTION
THE ALCHEMIST	FICTION
THE DAVINCI CODE	MYSTERY/THRILLER

book 15 ×

Query Completed

ENG IN 14:33 17-03-2024

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

MySQL Workbench

Local instance MySQL80 × unconnected ×

File Edit View Query Database Server Tools Scripting Help

library_pro* ×

```

281
282
283 # Retrieve the book title, category, and rental price of all available books.
284 • select book_title,category,rental_price from book where status='yes';
285
286

```

Result Grid | Filter Rows: Export: Wrap Cell Content:

book_title	category	rental_price
MY EXPERIMENT OF LIFE	AUTOBIOGRAPHY	600.00
A BRIEF HISTORY	HISTORY	900.00
GONE GIRL	MYSTERY/THRILLER	250.00
KAYAR	MALAYALAM NOVEL	500.00
AAANKALLOPILLI	FICTION	350.00
THE DAVINCI CODE	MYSTERY/THRILLER	900.00
A GAME OF THRONES	FANTASY	900.00
STEVE JOBS	BIOGRAPHY	650.00
BECOMING	BIOGRAPHY	800.00
THATHVAMASI	FICTION	800.00

book 18 ×

Query Completed

ENG IN 14:37 17-03-2024

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

The screenshot shows the MySQL Workbench interface. In the top-left pane, there is a code editor window titled "library_pro" containing the following SQL query:

```
285
286
287
288
289
290 #List the employee names and their respective salaries in descending order of salary.
291
292 • select emp_name,salary from employee order by salary desc;
293
294
295
```

The result grid below displays the output of the query:

emp_name	salary
vismaya	25000.00
max	25000.00
samson	25000.00
muneer	20000.00
mosh	20000.00
anas	20000.00
ahana	12000.00
minha	12000.00
ram	12000.00
john	12000.00
fera	10000.00
sanam	10000.00
feryal	10000.00

The status bar at the bottom right indicates "Query Completed" and shows the date and time as "17-03-2024 14:40".

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

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

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

```

302 • select i.issued_cust,b.book_title,c.customer_name
303   from issuestatus i left join book b
304   on i.isbn_book = b.isbn
305   left join customer c on c.customer_id = i.issued_cust;
306

```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid

issued_cust	book_title	customer_name
1200	KAYAR	AFLA
1202	DRIVE	AISWARYA
1210	NEUROMANCER	dua
1211	BOSSYPANTS	amir
1209	OZHICHUVIDUKA	mammy
1209	NALLAVANNAM	mammy
1205	AANAKKALLOPILLI	PRAVEEN
1203	SAPIENS	MRDULA
1204	SAPIENS	PRANAV
1211	KAYAR	amir
1206	GONE GIRL	Rajesh
1208	HALF GIRLFRIEND	aysha
1210	HALF GIRLFRIEND	dua
1207	NEUROMANCER	CHINNU
1205	KAYAR	PRAVEEN
1206	NAI AVANNAM	Rajesh

Result 40 | Read Only

Query Completed

15:18 17-03-2024 ENG IN

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

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

Display the total count of books in each category.

```

316 • select category,count(*)as total_count_of_books from book
317   group by category;
318
319
320
321
322

```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid

category	total_count_of_books
HISTORY	3
AUTOBIOGRAPHY	1
BUSINESS	1
MYSTERY/THRILLER	2
BIOGRAPHY	3
MALAYALAM NOVEL	1
SCIENCE FICTION	1
NOVEL	1
FICTION	5
FANTASY	2
POEM	1

Result 42 | Read Only

Query Completed

15:26 17-03-2024 ENG IN

5. Retrieve the employee names and their positions for the employees whose salaries are above Rs.20,000

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

314
315 # Retrieve the employee names and their positions for the employees whose salaries are above Rs.20,000
316 • select emp_name,position,salary from employee where salary > 20000;
317
318
319
320
321
322
323
324
325
326
327
328
--
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid

emp_name	position	salary
vismaya	library assistant	25000.00
max	library assistant	25000.00
samson	library assistant	25000.00

employee 44 x

Query Completed

15:29 17-03-2024 ENG IN 15:29 17-03-2024

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

315 # Retrieve the employee names and their positions for the employees whose salaries are above Rs.20,000
316 • select emp_name,position,salary from employee where salary > 20000;
317
318
319 • create or replace view empsalary
320 as select emp_name,position,salary from employee
321 where salary > 20000;
322 • select * from empsalary;
323
--
```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid

emp_name	position	salary
vismaya	library assistant	25000.00
max	library assistant	25000.00
samson	library assistant	25000.00

empsalary 45 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
65	15:28:54	select emp_name,positions from employee where salary > 20000 LIMIT 0, 1000	Error Code: 1054. Unknown column 'positions' in 'Field list'	0.000 sec
66	15:29:04	select emp_name,position from employee where salary > 20000 LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
67	15:29:17	select emp_name,position,salary from employee where salary > 20000 LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
68	15:30:57	create or replace view empsalary as select emp_name,position,salary from employee where salary > 20000	Error Code: 1146. Table 'sales.employee' doesn't exist	0.000 sec
69	15:31:16	create or replace view empsalary as select emp_name,position,salary from employee where salary > 20000	0 row(s) affected	0.031 sec
70	15:31:22	select * from empsalary LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

Query Completed

15:31 17-03-2024 ENG IN 15:31 17-03-2024

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

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

327
328 #List the customer names who registered before 2022-01-01 and have not issued any books yet.
329
330 • select c.customer_id,c.customer_name,c.reg_date,i.issue_id
331 from customer c left join issuestatus i
332 on c.customer_id=i.issued_cust
333 where c.reg_date < '2022-01-01' and i.issue_id is null;
334
335
336 • select customer_name,reg_date from customer where reg_date < '2022-01-01';
337
338
339 delimiter $
340 • create procedure get_customer(get_date date)
341 begin
342     select customer_name,reg_date from customer where reg_date < get_date;
343 end $
344 delimiter ;
345 • call get_cust('2022-01-01');

346
347
348
349
350
351
352

```

Query Completed

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

327
328 #List the customer names who registered before 2022-01-01 and have not issued any books yet.
329
330 • select c.customer_id,c.customer_name,c.reg_date,i.issue_id
331 from customer c left join issuestatus i
332 on c.customer_id=i.issued_cust
333 where c.reg_date < '2022-01-01' and i.issue_id is null;
334
335
336 • select customer_name,reg_date from customer where reg_date < '2022-01-01';
337
338
339 delimiter $
340 • create procedure get_customer(get_date date)
341 begin

```

Result Grid | Filter Rows: Export: Wrap Cell Content:

customer_id	customer_name	reg_date	issue_id
1201	ROHIT	2021-10-22	NULL

Result 50 | Read Only

Query Completed

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

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

367
368 #. Display the branch numbers and the total count of employees in each branch.
369
370 • select branch_no,count(branch_no)as total_count_employs from employeee
371 group by Branch_no;
372
373 • select b.branch_no,b.branch_address,count(e.branch_no) as 'count of employees'
374 from branch b left join employeee e
375 on b.branch_no=e.branch_no
376 group by b.branch_no,b.branch_address;
377

```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid

branch_no	branch_address	count of employees
1	mumbai	2
2	kolkata	1
3	kochi	1
4	chennai	1
5	banglore	2
6	kochi	2
7	chennai	1
8	trivandrum	2
9	calicut	1
10	trivandrum	0

Result 54 x Query Completed Read Only

15:49 17-03-2024

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

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

378
379
380 # Display the names of customers who have issued books in the month of June 2023.
381
382 • select c.customer_name,i.issue_date
383 from customer c join issuestatus i
384 on c.customer_id= i.issued_cust
385 where extract(year from issue_date)=2023
386 and extract(month from issue_date)=6;
387
388

```

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid

customer_name	issue_date
AFLA	2023-06-22
PRAVEEN	2023-06-10
Rajesh	2023-06-06

Result 56 x Query Completed Read Only

15:57 17-03-2024

9. Retrieve book_title from book table containing history.

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

389
390
391
392
393
394 # Retrieve book_title from book table containing history.
395 • select book_title,category from book where category='history';
396
397 • SELECT book_title
398   FROM book
399   WHERE book_title LIKE '%history%';

```

Result Grid | Filter Rows: Export: Wrap Cell Content:

book_title	category
THE HISTORY OF LOVE	HISTORY
A BRIEF HISTORY	HISTORY
APIENS	HISTORY

Result Grid Form Editor Field Types Query Stats

book 58 x youtube.com Read Only

Query Completed

16:02 17-03-2024

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

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

409
410
411
412
413 #Retrieve the branch numbers along with the count of employees for branches having more than 5 employees
414 • SELECT Branch_no, COUNT(*) AS Total_count_emp
415   FROM Employee
416   GROUP BY Branch_no
417   HAVING total_count_emp > 5;
...

```

Result Grid | Filter Rows: Export: Wrap Cell Content:

Branch_no	Total_count_emp
-----------	-----------------

Result Grid Form Editor Field Types Query Stats

Result 64 x Rearr Inv

Action Output

#	Time	Action	Message	Duration / Fetch
86	16:06:50	select emp_name,branch_no,count(branch_no)from employee where branch_no>(select emp_name from...	Error Code: 1140. In aggregated query without GROUP BY, expression #1 of SELECT list contains nonag...	0.000 sec
87	16:08:45	select branch_no,count(emp_name) as "count" from employee group by branch_no having count(emp_...	0 row(s) returned	0.000 sec / 0.000 sec
88	16:09:49	select branch_no,count(emp_name) as count_emp from employee group by branch_no having count_e...	0 row(s) returned	0.000 sec / 0.000 sec
89	16:12:58	SELECT Branch_no,COUNT(*) AS Total_count_emp FROM Employee GROUP BY Branch_no HAVING...	0 row(s) returned	0.000 sec / 0.000 sec
90	16:13:39	select * from employee LIMIT 0, 1000	13 row(s) returned	0.000 sec / 0.000 sec
91	16:15:25	SELECT Branch_no,COUNT(*) AS Total_count_emp FROM Employee GROUP BY Branch_no HAVING...	0 row(s) returned	0.000 sec / 0.000 sec

Query Completed

16:15 17-03-2024

MySQL Workbench - Local instance MySQL80 - unconnected

```

418
419
420
421
422 • create view count_emp_5 as
423     select b.branch_no,b.branch_address,e.emp_name
424     from branch b join employee e
425     on b.branch_no=e.branch_no;
426 • select * from count_emp_5;
427
428 • select branch_no,branch_address,count(emp_name) as count_emp
429     from count_emp_5
430     group by branch_no
431     having count(emp_name)>5;
432
433

```

Output

Action	Time	Action	Message	Duration / Fetch
89	16:12:58	SELECT Branch_no,COUNT(*) AS Total_count_emp FROM Employee GROUP BY Branch_no HAVING COUNT(*) > 5;	0 row(s) returned	0.000 sec / 0.000 sec
90	16:13:39	select * from employee LIMIT 0, 1000	13 row(s) returned	0.000 sec / 0.000 sec
91	16:15:25	SELECT Branch_no,COUNT(*) AS Total_count_emp FROM Employee GROUP BY Branch_no HAVING COUNT(*) > 5;	0 row(s) returned	0.000 sec / 0.000 sec
92	16:16:37	create view counttemp_5 as select b.branch_no,b.branch_address,e.emp_name from branch b join employee e on b.branch_no=e.branch_no;	0 row(s) affected	0.016 sec
93	16:16:42	select * from counttemp_5 LIMIT 0, 1000	13 row(s) returned	0.000 sec / 0.000 sec
94	16:16:55	select branch_no,branch_address,count(emp_name) as "count" from counttemp_5 group by branch_no	0 row(s) returned	0.015 sec / 0.000 sec

Query Completed

11. which publisher published highest number of books in the library

MySQL Workbench - Local instance MySQL80 - unconnected

```

433
434
435
436
437
438 # which publisher published highest number of books
439 • select * from book;
440
441 • select publisher,count(*) as total_books
442     from book
443     group by publisher
444     order by total_books desc
445     limit 5;
446
447

```

Result Grid

publisher	total_books
DC BOOKS	7
BANTAM	2
W.W.NORTON&COMPANY	1
NAVIAN	1
CROWN PUBLISHING	1

Result 68 x

Query Completed

12. find out average rental price in books in each category

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

448
449
450
451
452
453
454
455
456
457     #find average rental price in each books in each category
458
459 •   select category,avg(rental_price) as avg_rental_price from book
460     group by category;
461
462

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Result 69 | Read Only

category	avg_rental_price
BUSINESS	300.000000
MYSTERY/THRILLER	575.000000
BIOGRAPHY	1983.333333
MALAYALAM NOVEL	500.000000
SCIENCE FICTION	500.000000
NOVEL	550.000000
FICTION	520.000000
FANTASY	850.000000
POEM	600.000000

Query Completed

16:27 17-03-2024 ENG IN

13.retrieve total number of customer in customer table

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

456
457     #Find the total number of customers from customer table.
458
459 delimiter $
460 •   create procedure count_cust(out cust int)
461 begin
462     select count(customer_name) into cust from customer;
463 end $
464 delimiter ;
465
466 •   call count_cust(@result);
467 •   select @result;
468
469
470

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Result 70 | Read Only

@result
17

Query Completed

16:30 17-03-2024 ENG IN

14.find out the branches where the average salary below 15000

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

473
474
475
476
477 #Identify the branches where the average salary of employees is below Rs. 15000
478 • select branch_no,round(avg(salary),2) as avg_salary from employee
479 group by branch_no
480 having avg_salary<15000;
481
482
483
484
485
486
487
--
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Result Grid

branch_no	avg_salary
3	10000.00
5	12000.00
8	10000.00

Result 72 x

Query Completed

16:33 17-03-2024 ENG IN

15.find out total revenue generated from book rentals

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```

481
482
483 #find out total revenue generated from book rentals
484
485 • SELECT SUM(b.Rental_Price) AS Total_Revenue|
486 FROM Book b
487 JOIN IssueStatus i
488 ON b.ISBN = i.Issn_book;
489
--
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Result Grid

Total_Revenue
13700.00

Action Output

#	Time	Action	Message	Duration / Fetch
99	16:30:12	call count_cust(@result)	1 row(s) affected	0.000 sec
100	16:30:12	select @result LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
101	16:32:27	select branch_no,avg(salary) as avg_salary from employeee group by branch_no having avg_salary<15...	3 row(s) returned	0.000 sec / 0.000 sec
102	16:32:54	select branch_no,round(avg(salary),2) as avg_salary from employee group by branch_no having avg_s...	3 row(s) returned	0.000 sec / 0.000 sec
103	16:41:02	SELECT SUM(b.Rental_Price) AS Total_Revenue FROM Books b JOIN IssueStatus i ON b.ISBN = i.Issn...	Error Code: 1054. Unknown column 'b.Rental_Price' in field list'	0.000 sec
104	16:41:15	SELECT SUM(b.Rental_Price) AS Total_Revenue FROM Book b JOIN IssueStatus i ON b.ISBN = i.Issn...	1 row(s) returned	0.032 sec / 0.000 sec

Query Completed

16:41 17-03-2024 ENG IN

16.retrieve customer name who have not returned any book yet

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```
497 #List the customers who have not returned any books yet:
498
499 • SELECT DISTINCT c.Customer_name
500   FROM Customer c
501   LEFT JOIN IssueStatus i
502     ON c.Customer_Id = i.Issued_cust
503   WHERE i.Issue_Id IS NULL;
504
505
506
507
508
509
510
511
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Result 74 x | Read Only

Customer_name

ROHIT
alia
saksha
aria
Jwel
fera

Query Completed

16:44 17-03-2024 ENG IN

MySQL Workbench

Local instance MySQL80 unconnected

File Edit View Query Database Server Tools Scripting Help

library_pro*

```
502   ON c.Customer_Id = i.Issued_cust
503   WHERE i.Issue_Id IS NULL;
504
505
506   #create a before delete trigger if we try to delete employee details whose salary is >20000 in the employee table.
507   delimiter $
508   • create trigger before_delete_trigger
509     before delete on employee
510     for each row
511     begin
512       if old.salary > 20000 then
513         signal sqlstate "45000"
514         set message_text = "can't delete the details of employee whose salary > 20000";
515       end if;
516     end $
517   delimiter ;
518
519   • delete from employee where emp_id=520;
520
521   • select * from employee;
```

Query Completed

16:52 17-03-2024 ENG IN