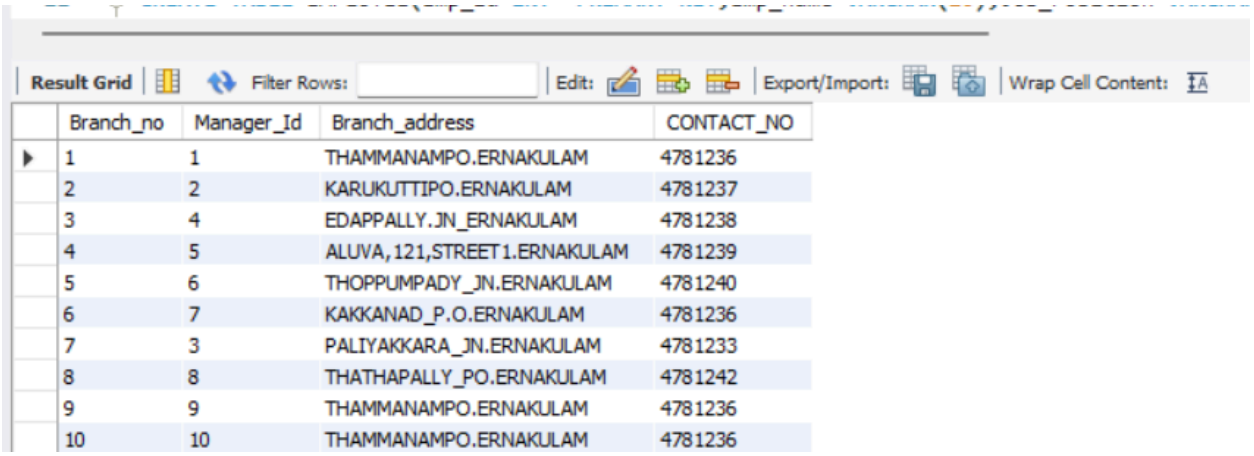
Create a database named library and create following TABLES in the database:

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

Attributes for the tables:

1. Branch

·Branch_no - Set as PRIMARY KEY
·Manager_Id
·Branch_address
·Contact_no

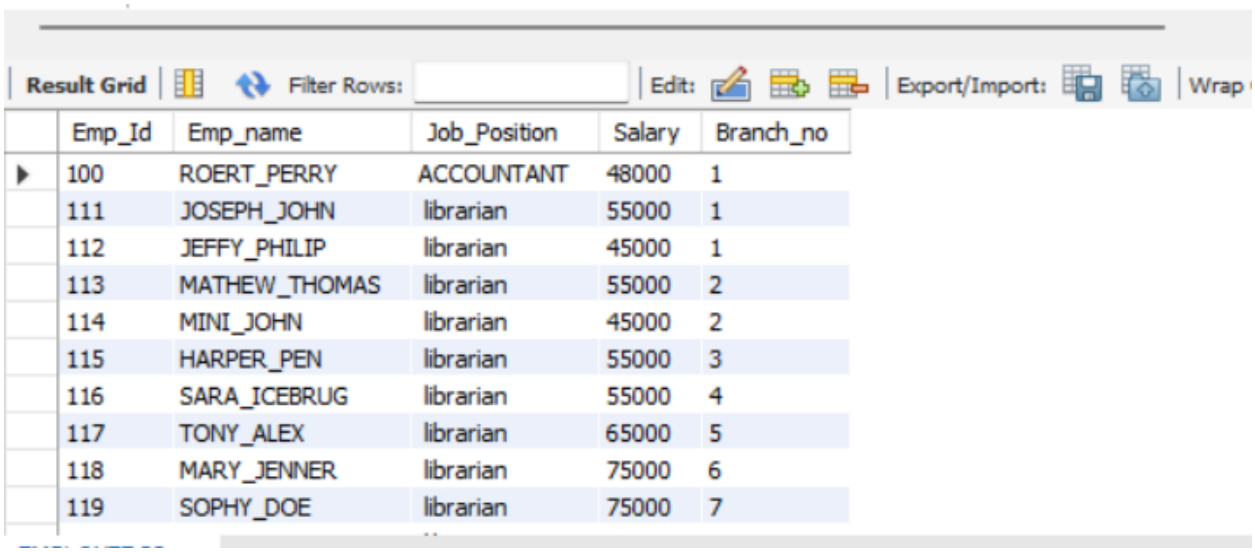


Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Branch_no	Manager_Id	Branch_address	CONTACT_NO
1	1	THAMMANAMPO.ERNAKULAM	4781236
2	2	KARUKUTTIPO.ERNAKULAM	4781237
3	4	EDAPPALLY.JN_ERNAKULAM	4781238
4	5	ALUVA,121,STREET1.ERNAKULAM	4781239
5	6	THOPPUMPADY_JN.ERNAKULAM	4781240
6	7	KAKKANAD_P.O.ERNAKULAM	4781236
7	3	PALIYAKKARA_JN.ERNAKULAM	4781233
8	8	THATHAPALLY_PO.ERNAKULAM	4781242
9	9	THAMMANAMPO.ERNAKULAM	4781236
10	10	THAMMANAMPO.ERNAKULAM	4781236

2. Employee

·Emp_Id – Set as PRIMARY KEY
·Emp_name
·Position
·Salary
·Branch_no - Set as FOREIGN KEY and it should refer branch_no in EMPLOYEE table



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

Emp_Id	Emp_name	Job_Position	Salary	Branch_no
100	ROERT_PERRY	ACCOUNTANT	48000	1
111	JOSEPH_JOHN	librarian	55000	1
112	JEFFY_PHILIP	librarian	45000	1
113	MATHEW_THOMAS	librarian	55000	2
114	MINI_JOHN	librarian	45000	2
115	HARPER_PEN	librarian	55000	3
116	SARA_ICEBRUG	librarian	55000	4
117	TONY_ALEX	librarian	65000	5
118	MARY_JENNER	librarian	75000	6
119	SOPHY_DOE	librarian	75000	7

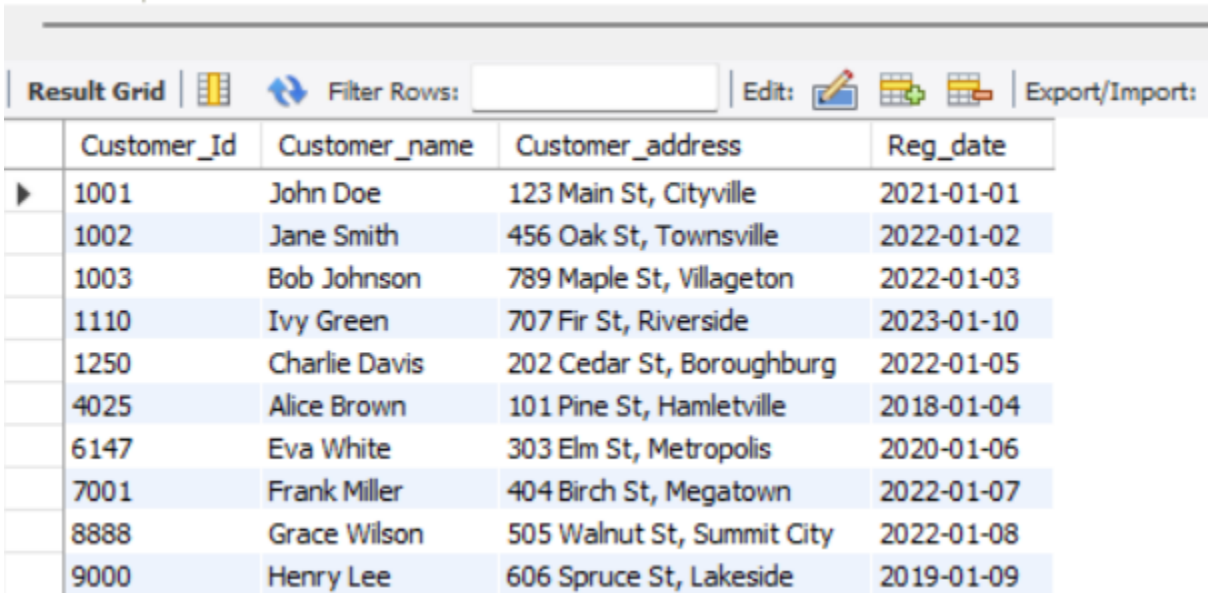
3. Customer

·Customer_Id - Set as PRIMARY KEY

·Customer_name

·Customer_address

·Reg_date

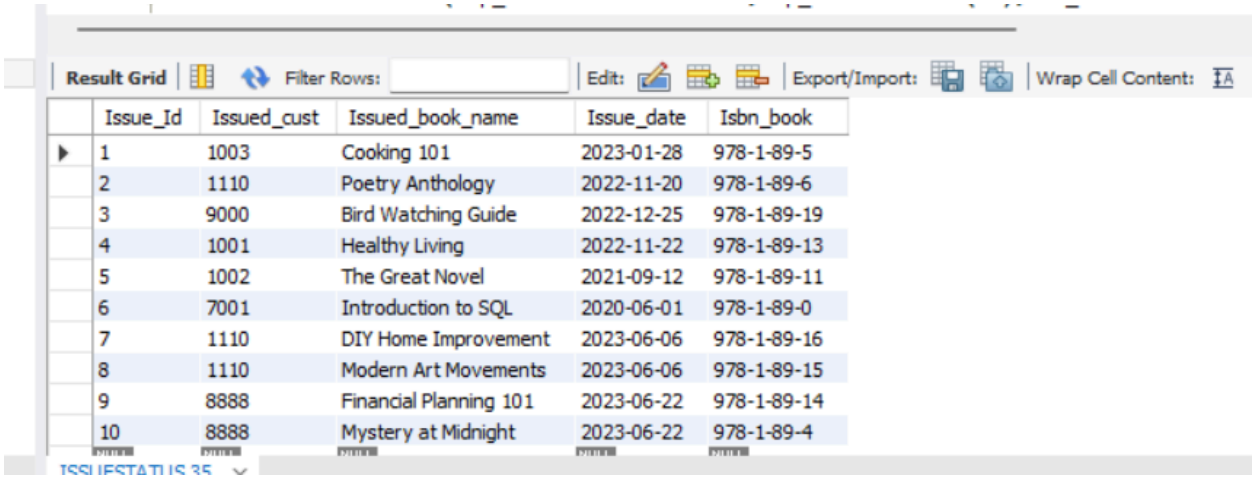


Result Grid | Filter Rows: | Edit: | Export/Import:

Customer_Id	Customer_name	Customer_address	Reg_date
1001	John Doe	123 Main St, Cityville	2021-01-01
1002	Jane Smith	456 Oak St, Townsville	2022-01-02
1003	Bob Johnson	789 Maple St, Villageton	2022-01-03
1110	Ivy Green	707 Fir St, Riverside	2023-01-10
1250	Charlie Davis	202 Cedar St, Boroughburg	2022-01-05
4025	Alice Brown	101 Pine St, Hamletville	2018-01-04
6147	Eva White	303 Elm St, Metropolis	2020-01-06
7001	Frank Miller	404 Birch St, Megatown	2022-01-07
8888	Grace Wilson	505 Walnut St, Summit City	2022-01-08
9000	Henry Lee	606 Spruce St, Lakeside	2019-01-09

4. 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

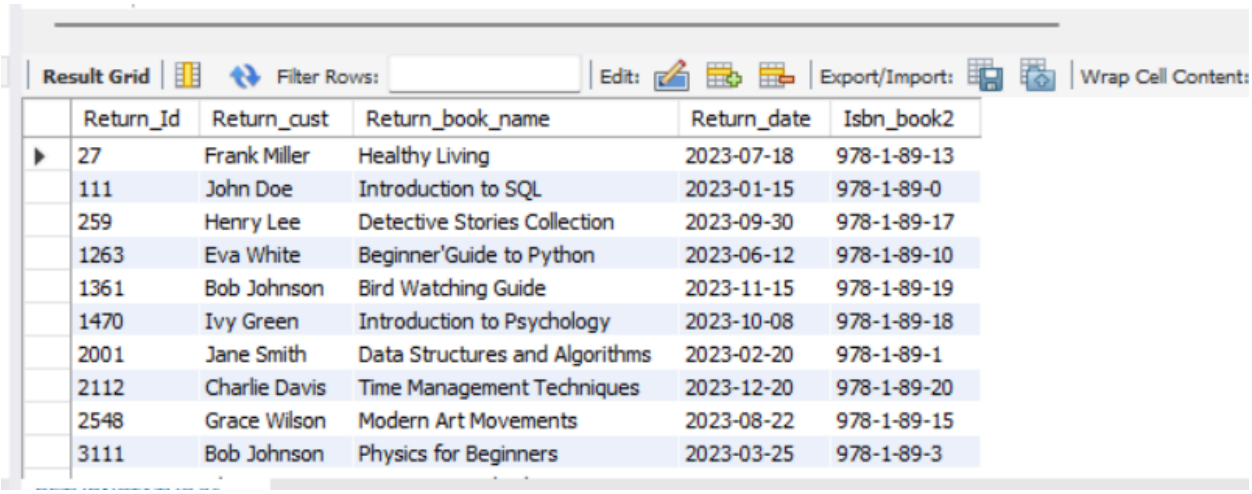


Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

Issue_Id	Issued_cust	Issued_book_name	Issue_date	Isbn_book
1	1003	Cooking 101	2023-01-28	978-1-89-5
2	1110	Poetry Anthology	2022-11-20	978-1-89-6
3	9000	Bird Watching Guide	2022-12-25	978-1-89-19
4	1001	Healthy Living	2022-11-22	978-1-89-13
5	1002	The Great Novel	2021-09-12	978-1-89-11
6	7001	Introduction to SQL	2020-06-01	978-1-89-0
7	1110	DIY Home Improvement	2023-06-06	978-1-89-16
8	1110	Modern Art Movements	2023-06-06	978-1-89-15
9	8888	Financial Planning 101	2023-06-22	978-1-89-14
10	8888	Mystery at Midnight	2023-06-22	978-1-89-4

ISSUESTATUS 35

5. 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



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

Return_Id	Return_cust	Return_book_name	Return_date	Isbn_book2
27	Frank Miller	Healthy Living	2023-07-18	978-1-89-13
111	John Doe	Introduction to SQL	2023-01-15	978-1-89-0
259	Henry Lee	Detective Stories Collection	2023-09-30	978-1-89-17
1263	Eva White	Beginner'Guide to Python	2023-06-12	978-1-89-10
1361	Bob Johnson	Bird Watching Guide	2023-11-15	978-1-89-19
1470	Ivy Green	Introduction to Psychology	2023-10-08	978-1-89-18
2001	Jane Smith	Data Structures and Algorithms	2023-02-20	978-1-89-1
2112	Charlie Davis	Time Management Techniques	2023-12-20	978-1-89-20
2548	Grace Wilson	Modern Art Movements	2023-08-22	978-1-89-15
3111	Bob Johnson	Physics for Beginners	2023-03-25	978-1-89-3

6. Books

·ISBN - Set as PRIMARY KEY

·Book_title

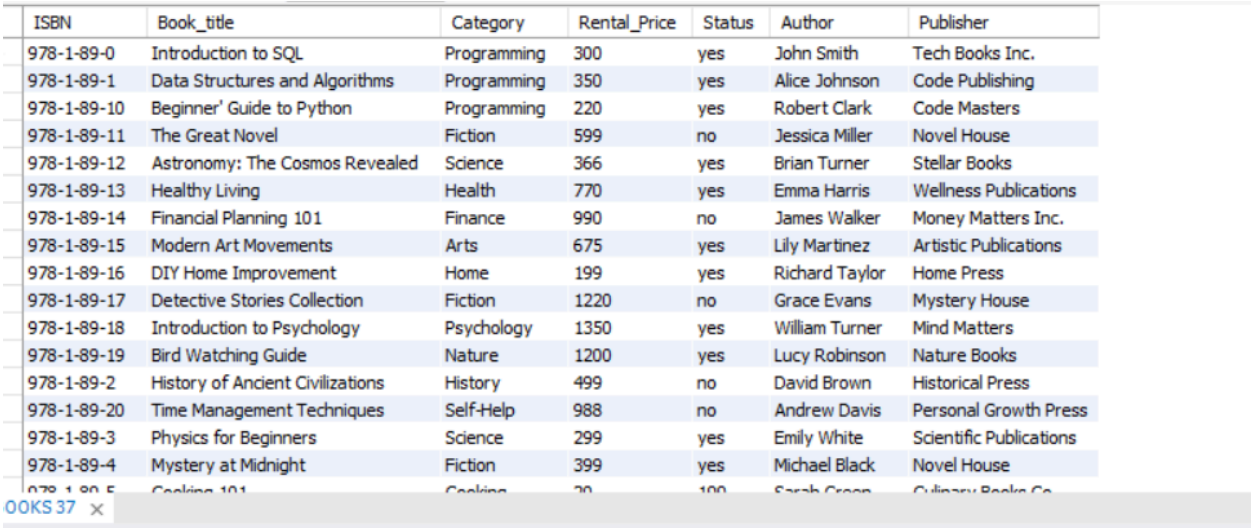
·Category

·Rental_Price

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

Author

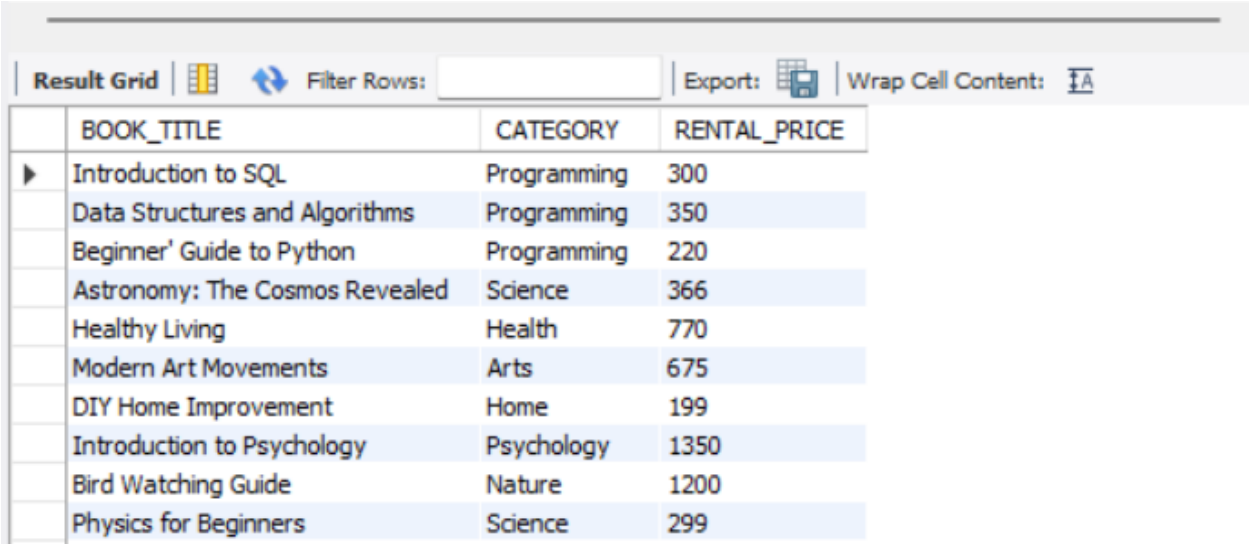
·Publisher



ISBN	Book_title	Category	Rental_Price	Status	Author	Publisher
978-1-89-0	Introduction to SQL	Programming	300	yes	John Smith	Tech Books Inc.
978-1-89-1	Data Structures and Algorithms	Programming	350	yes	Alice Johnson	Code Publishing
978-1-89-10	Beginner' Guide to Python	Programming	220	yes	Robert Clark	Code Masters
978-1-89-11	The Great Novel	Fiction	599	no	Jessica Miller	Novel House
978-1-89-12	Astronomy: The Cosmos Revealed	Science	366	yes	Brian Turner	Stellar Books
978-1-89-13	Healthy Living	Health	770	yes	Emma Harris	Wellness Publications
978-1-89-14	Financial Planning 101	Finance	990	no	James Walker	Money Matters Inc.
978-1-89-15	Modern Art Movements	Arts	675	yes	Lily Martinez	Artistic Publications
978-1-89-16	DIY Home Improvement	Home	199	yes	Richard Taylor	Home Press
978-1-89-17	Detective Stories Collection	Fiction	1220	no	Grace Evans	Mystery House
978-1-89-18	Introduction to Psychology	Psychology	1350	yes	William Turner	Mind Matters
978-1-89-19	Bird Watching Guide	Nature	1200	yes	Lucy Robinson	Nature Books
978-1-89-2	History of Ancient Civilizations	History	499	no	David Brown	Historical Press
978-1-89-20	Time Management Techniques	Self-Help	988	no	Andrew Davis	Personal Growth Press
978-1-89-3	Physics for Beginners	Science	299	yes	Emily White	Scientific Publications
978-1-89-4	Mystery at Midnight	Fiction	399	yes	Michael Black	Novel House

OOKS 37

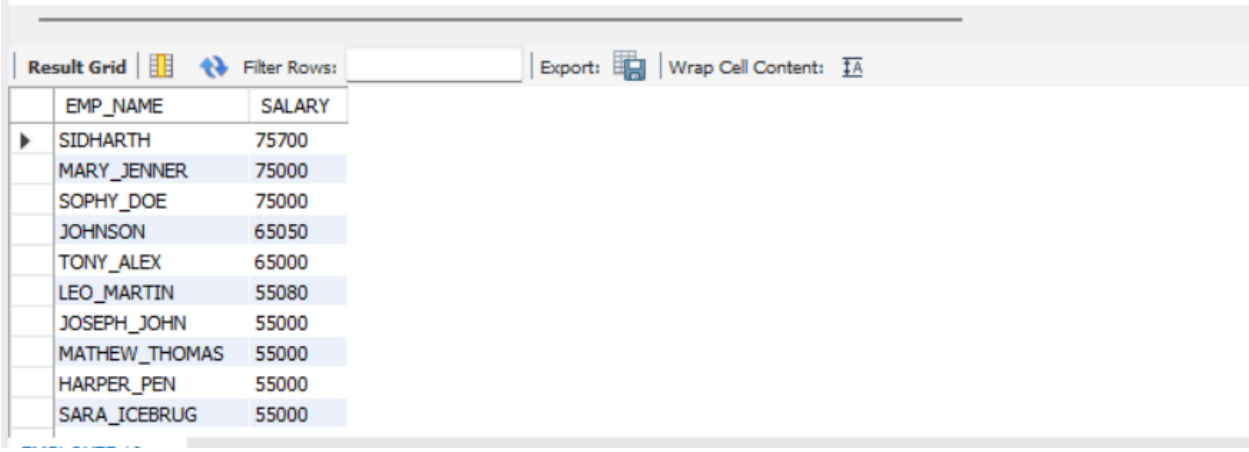
1.Retrieve the book title, category, and rental price of all available books.
SELECT BOOK_TITLE,CATEGORY,RENTAL_PRICE FROM BOOKS WHERE STATUS='YES';



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

BOOK_TITLE	CATEGORY	RENTAL_PRICE
Introduction to SQL	Programming	300
Data Structures and Algorithms	Programming	350
Beginner' Guide to Python	Programming	220
Astronomy: The Cosmos Revealed	Science	366
Healthy Living	Health	770
Modern Art Movements	Arts	675
DIY Home Improvement	Home	199
Introduction to Psychology	Psychology	1350
Bird Watching Guide	Nature	1200
Physics for Beginners	Science	299

#2. List the employee names and their respective salaries in descending order of salary.
SELECT EMP_NAME,SALARY FROM EMPLOYEE ORDER BY SALARY DESC;



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

EMP_NAME	SALARY
SIDHARTH	75700
MARY_JENNER	75000
SOPHY_DOE	75000
JOHNSON	65050
TONY_ALEX	65000
LEO_MARTIN	55080
JOSEPH_JOHN	55000
MATHEW_THOMAS	55000
HARPER_PEN	55000
SARA_ICEBRUG	55000

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

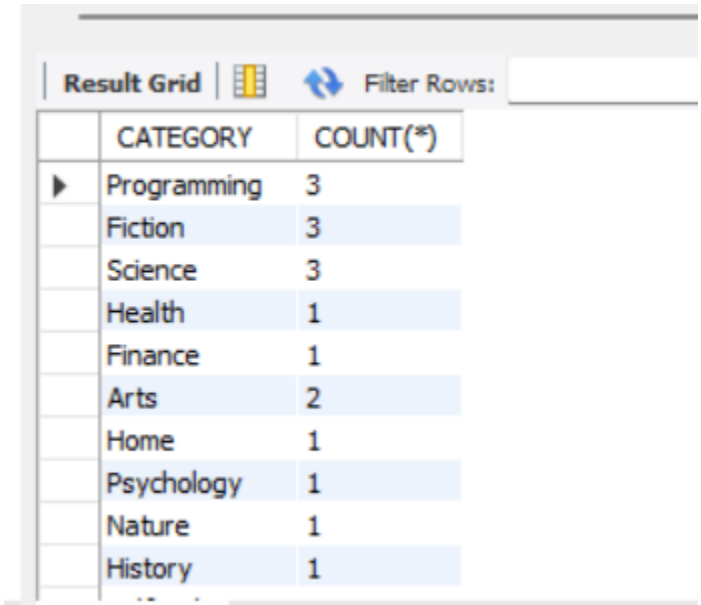
SELECT
CUSTOMER.CUSTOMER_NAME,CUSTOMER.CUSTOMER_ID,IssueStatus.Issue_Id,ISSUESTATUS.Issued_cust,ISSUESTATUS.Issued_book_name

FROM CUSTOMER INNER JOIN ISSUESTATUS ON
CUSTOMER.CUSTOMER_ID=ISSUESTATUS.ISSUED_CUST;

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

CUSTOMER_NAME	CUSTOMER_ID	Issue_Id	Issued_cust	Issued_book_name
John Doe	1001	4	1001	Healthy Living
Jane Smith	1002	5	1002	The Great Novel
Bob Johnson	1003	1	1003	Cooking 101
Ivy Green	1110	2	1110	Poetry Anthology
Ivy Green	1110	7	1110	DIY Home Improvement
Ivy Green	1110	8	1110	Modern Art Movements
Frank Miller	7001	6	7001	Introduction to SQL
Grace Wilson	8888	9	8888	Financial Planning 101
Grace Wilson	8888	10	8888	Mystery at Midnight
Henry Lee	9000	3	9000	Bird Watching Guide

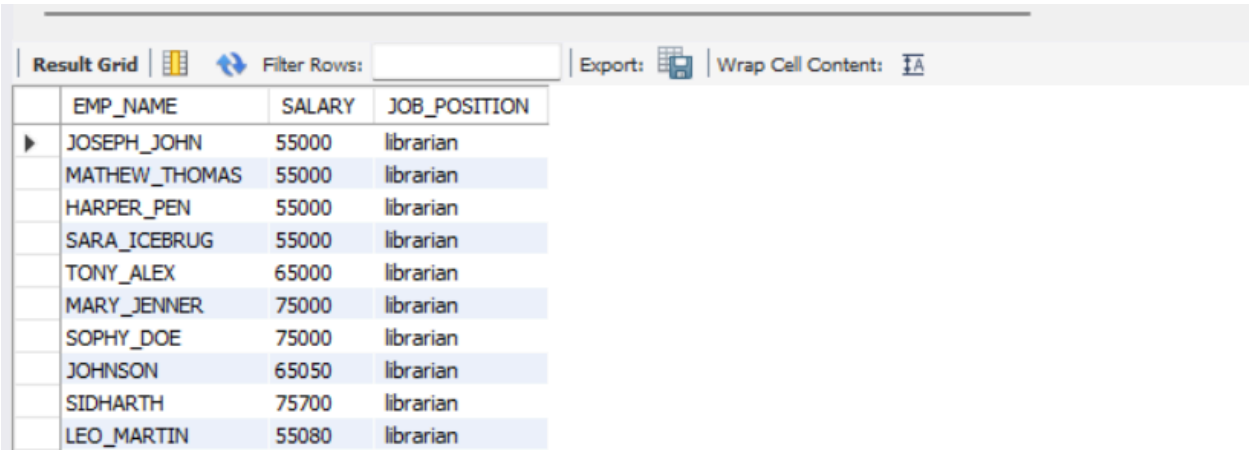
#4. Display the total count of books in each category.
SELECT CATEGORY,COUNT(*) FROM BOOKS GROUP BY CATEGORY;



Result Grid | Filter Rows:

CATEGORY	COUNT(*)
Programming	3
Fiction	3
Science	3
Health	1
Finance	1
Arts	2
Home	1
Psychology	1
Nature	1
History	1

#5 Retrieve the employee names and their positions for the employees whose salaries are above Rs.50,000.
SELECT EMP_NAME,JOB_POSITION FROM EMPLOYEE WHERE SALARY>50000;

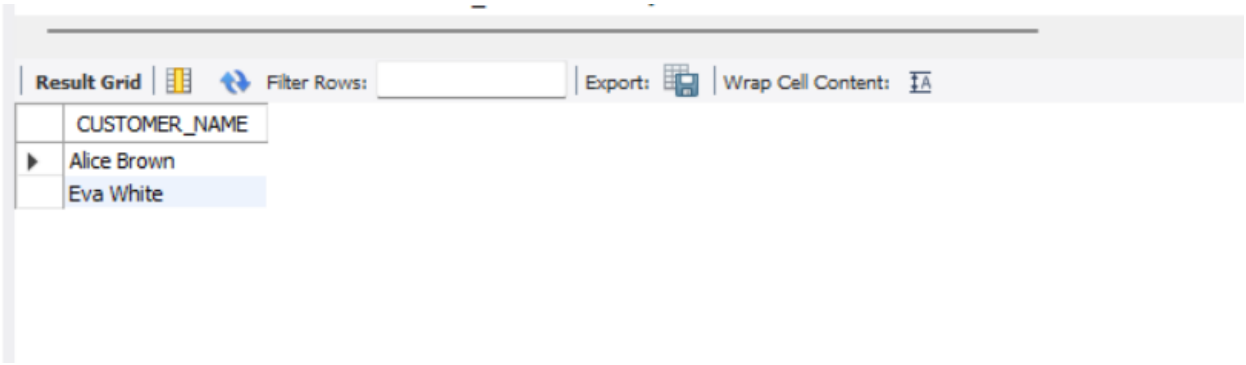


Result Grid | Filter Rows: | Export: | Wrap Cell Content:

EMP_NAME	SALARY	JOB_POSITION
JOSEPH_JOHN	55000	librarian
MATHEW_THOMAS	55000	librarian
HARPER_PEN	55000	librarian
SARA_ICEBRUG	55000	librarian
TONY_ALEX	65000	librarian
MARY_JENNER	75000	librarian
SOPHY_DOE	75000	librarian
JOHNSON	65050	librarian
SIDHARTH	75700	librarian
LEO_MARTIN	55080	librarian

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

```
SELECT CUSTOMER_NAME FROM CUSTOMER LEFT JOIN issueStatus ON issued_cust = customer.customer_id WHERE reg_date < '2022-01-01'
 AND  issueStatus.ISSUED_CUST IS NULL;
```



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

CUSTOMER_NAME
Alice Brown
Eva White

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

```
SELECT BRANCH_NO,COUNT(EMP_ID) FROM EMPLOYEE GROUP BY BRANCH_NO;
```

```
134 •   SELECT BRANCH_NO,COUNT(EMP_ID) FROM EMPLOYEE GROUP BY BRANCH_NO;
```

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

BRANCH_NO	COUNT(EMP_ID)
1	6
2	2
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1

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

```
135     #8.Display the names of customers who have issued books in the month of June 2023.
136
137 •    SELECT CUSTOMER.CUSTOMER_ID,CUSTOMER.CUSTOMER_NAME ,ISSUESTATUS.ISSUED_CUST ,ISSUESTATUS.ISSUED_BOOK_NAME
138     FROM CUSTOMER INNER JOIN  ISSUESTATUS ON CUSTOMER.CUSTOMER_ID=ISSUESTATUS.ISSUED_CUST
139     WHERE ISSUESTATUS.issue_date BETWEEN '2023-06-01' AND '2023-06-30';
```

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

CUSTOMER_ID	CUSTOMER_NAME	ISSUED_CUST	ISSUED_BOOK_NAME
1110	Ivy Green	1110	DIY Home Improvement
1110	Ivy Green	1110	Modern Art Movements
8888	Grace Wilson	8888	Financial Planning 101
8888	Grace Wilson	8888	Mystery at Midnight

#9. Retrieve book_title from book table containing history.
SELECT BOOK_TITLE FROM BOOKS WHERE CATEGORY='HISTORY';

```
141 •   SELECT BOOK_TITLE FROM BOOKS WHERE CATEGORY='HISTORY';
```

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

BOOK_TITLE
History of Ancient Civilizations

#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;

```
144 •   SELECT BRANCH_NO,COUNT(EMP_ID) FROM EMPLOYEE GROUP BY BRANCH_NO HAVING COUNT(EMP_ID)>=5;
```

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

BRANCH_NO	COUNT(EMP_ID)
1	6