

WELCOME TO LIBRARY MANAGEMENT PROJECT



~ABOUT THE PROJECT~

Hello! My name is Sristi Pathak and in this project i have utilise the SQL Queries to solve question which are related to library management. The below pictures are the table creation.

```
-- Table Creation(members table)
create table membersss(
member_id int primary key auto_increment,
member_names varchar(100),
phone varchar(15),
email varchar(100),
address varchar(200),
membership_date date);
```

```
-- Books Table
create table read_bookss(
book_id int primary key auto_increment,
title varchar(200),
author varchar(100),
category varchar(50),
publication_year int,
available_copies int);
```

```
-- Issued Books Table
create table issued_bookss(
issue_id int primary key auto_increment,
book_id int,
member_id int ,
issue_date date,
return_date date,
issued_by int,
foreign key (book_id) references read_bookss(book_id),
foreign key (member_id) references membersss(member_id),
foreign key (issued_by) references staff(staff_id));
```

```
-- Staff Table
create table staff(
staff_id int primary key auto_increment,
staff_name varchar(100),
role varchar(50),
salary int);
```

~List all Self-help books~

```
• SELECT  
  *  
 FROM  
  read_books  
 WHERE  
  category = 'Self-help';
```

	book_id	title	author	category	publication_year	available_copies
▶	4	Think and Grow Rich	Napoleon Hill	Self-help	1937	7
	5	The Power of Habit	Charles Duhigg	Self-help	2012	6
	6	Atomic Habits	James Clear	Self-help	2018	12
	20	Ikigai	Héctor García	Self-help	2016	13
	NULL	NULL	NULL	NULL	NULL	NULL

Show all members who joined after March 2023

```
SELECT
  *
FROM
  membersss
WHERE
  membership_date > '2023-03-01';
```

Result Grid						
	member_id	member_names	phone	email	address	membership_date
▶	3	Simran Kaur	9876598765	simran@gmail.com	Punjab	2023-03-10
	4	Priya Singh	9867543210	priya@gmail.com	Lucknow	2023-04-14
	5	Arjun Mehta	7845123698	arjun@gmail.com	Delhi	2023-03-02
	6	Nisha Pandey	9988776655	nisha@gmail.com	Agra	2023-03-15
	7	Vikas Kumar	9090909090	vikas@gmail.com	Patna	2023-04-01
	8	Ritu Thakur	9871234567	ritu@gmail.com	Bhopal	2023-05-20
	11	Aditya Roy	8009007001	aditya@gmail.com	Chennai	2023-05-11
	12	Kiran Patel	8787878787	kiran@gmail.com	Ahmedabad	2023-05-15
	13	Rakesh Yadav	9898989898	rakesh@gmail.com	Gurgaon	2023-03-25
	14	Sneha Kapoor	7778889990	sneha@gmail.com	Delhi	2023-04-04
*	NUL	NUL	NUL	NUL	NUL	NUL

Find books issued but not returned

```
SELECT  
    b.title, m.member_names, ib.issue_date  
FROM  
    issued_books ib  
        JOIN  
    read_books b ON ib.book_id = b.book_id  
        JOIN  
    members m ON ib.member_id = m.member_id  
WHERE  
    ib.return_date IS NULL;
```

title	member_names	issue_date
The Power of Habit	Simran Kaur	2023-03-05
The Monk Who Sold His Ferrari	Arjun Mehta	2023-03-08
The Hobbit	Vikas Kumar	2023-03-12
Half Girlfriend	Sahil Khan	2023-03-14
Think and Grow Rich	Kiran Patel	2023-03-17
Wings of Fire	Sneha Kapoor	2023-03-19
To Kill a Mockingbird	Manish Gupta	2023-03-20
The Secret	Amit Sharma	2023-03-21
2 States	Arjun Mehta	2023-03-23
The Girl on the Train	Vikas Kumar	2023-03-24
You Can Win	Sahil Khan	2023-03-25

Count how many books each staff member issued

```
SELECT  
    s.staff_name, COUNT(ib.issue_id) AS total_issued  
FROM  
    staff s  
    LEFT JOIN  
    issued_books ib ON s.staff_id = ib.issued_by  
GROUP BY s.staff_id;
```

	staff_name	total_issued
▶	Suresh Kumar	6
▶	Meena Sharma	5
▶	Rahul Singh	5
▶	Priyanka Das	4
▶	Harish Yadav	0
▶	Deepak Kumar	0
▶	Kavita Rani	0
▶	Rajesh Mehta	0

List top 5 recently issued books

```
SELECT  
    b.title, ib.issue_date  
FROM  
    issued_books ib  
        JOIN  
    read_books b ON ib.book_id = b.book_id  
ORDER BY ib.issue_date DESC  
LIMIT 5;
```

Result Grid | Filter Rows:

	title	issue_date
1.	You Can Win	2023-03-25
2.	The Girl on the Train	2023-03-24
3.	2 States	2023-03-23
4.	Digital Fortress	2023-03-22
5.	The Secret	2023-03-21

Show all books written by Dan Brown

```
SELECT
*
FROM
read_books
WHERE
author = 'Dan Brown';
```

	book_id	title	author	category	publication_year	available_copies
▶	13	Digital Fortress	Dan Brown	Thriller	1998	6
▶	14	Inferno	Dan Brown	Thriller	2013	5
●	NULL	NULL	NULL	NULL	NULL	NULL

Find members who belong to delhi

```
SELECT
*
FROM
membersss
WHERE
address = 'Delhi';
```

	member_id	member_names	phone	email	address	membership_date
▶	1	Amit Sharma	9876543210	amit@gmail.com	Delhi	2023-01-10
	5	Arjun Mehta	7845123698	arjun@gmail.com	Delhi	2023-03-02
	14	Sneha Kapoor	7778889990	sneha@gmail.com	Delhi	2023-04-04
	NULL	NULL	NULL	NULL	NULL	NULL

Show total books in each category

```
SELECT  
    category, COUNT(book_id) AS total_books  
FROM  
    read_books  
GROUP BY category;
```

	category	total_books
▶	Fiction	2
▶	Fantasy	2
▶	Finance	1
▶	Self-help	4
▶	Biography	2
▶	Motivation	2
▶	Thriller	4
▶	Spiritual	1
▶	Romance	2

Thank You!

For Viewing My

LIBRARY

MANAGEMENT PROJECT

