Library Management System

Data-set for a **Library Management System**, consisting of five tables:

Books table: The "Books" table stores information about the books available in the library.
- ➤ book_id (primary key)
- ➤ title
- ➤ author
- ➤ publication_year
- ➤ genre

Authors table: The "Authors" table stores information about the authors of the books available in the library.
- ➤ author_id (primary key)
- ➤ author_name

Members table: The "Members" table contains information about the library members who have registered to borrow books.
- ➤ member_id (primary key)
- ➤ member_name
- ➤ address
- ➤ email
- ➤ phone_number

Loans table: The "Loans" table keeps records of the books that have been borrowed by library members.
- ➤ loan_id (primary key)
- ➤ member_id (foreign key referencing Members table)
- ➤ book_id (foreign key referencing Books table)
- ➤ loan_date
- ➤ return_date

Reservations table: The "Reservations" table stores information about book reservations made by library members.
- ➤ reservation_id (primary key)
- ➤ member_id (foreign key referencing Members table)
- ➤ book_id (foreign key referencing Books table)
- ➤ reservation_date

Books table:		Alias name is "B"		
book_id	title	author	publication_year	genre
1	Introduction to Algorithms	Thomas H. Cormen	2009	Computer Science
2	Electric Machinery Fundamentals	Stephen J. Chapman	2018	Electrical
3	The Art of Electronics	Paul Horowitz	2015	Electronics
4	Engineering Mechanics: Statics	R.C. Hibbeler	2020	Mechanical
5	Reinforced Concrete Design	George F. Limbrunner	2017	Civil
6	Database Systems: The Complete Book	Hector Garcia-Molina	2021	Computer Science
7	Microelectronic Circuits	Adel S. Sedra	2016	Electronics
8	Signals and Systems	Alan V. Oppenheim	1997	Electrical
9	Heat Transfer: Principles and Applications	Yunus A. Cengel	2014	Mechanical
10	Structural Analysis	Russell C. Hibbeler	2019	Civil
11	Computer Networking: A Top-Down Approach	James F. Kurose	2020	Computer Science
12	Power System Analysis and Design	J. Duncan Glover	2017	Electrical
13	Digital Design and Computer Architecture	David Money Harris	2012	Computer Science
14	Mechanics of Materials	Ferdinand P. Beer	2015	Mechanical
15	Geotechnical Engineering: Principles and Practices	Donald P. Coduto	2018	Civil
16	Artificial Intelligence: A Modern Approach	Stuart Russell	2021	Computer Science
17	Electronic Devices and Circuit Theory	Robert L. Boylestad	2019	Electronics
18	Control Systems Engineering	Norman S. Nise	2016	Electrical
19	Fluid Mechanics	Frank M. White	2014	Mechanical
20	Transportation Engineering	C. Jotin Khisty	2017	Civil
21	Operating System Concepts	Abraham Silberschatz	2018	Computer Science
22	Digital Signal Processing	John G. Proakis	2013	Electrical
23	Fundamentals of Electric Circuits	Charles K. Alexander	2020	Electronics
24	Materials Science and Engineering	William D. Callister	2016	Mechanical
25	Highway Engineering	Daniel J. Findley	2019	Civil
26	Data Structures and Algorithms in Python	Michael T. Goodrich	2014	Computer Science
27	Introduction to Embedded Systems	Edward Ashford Lee	2011	Electrical
28	Power Electronics: Circuits, Devices, and Applications	Muhammad H. Rashid	2017	Electrical
29	Engineering Vibrations	Daniel J. Inman	2020	Mechanical
30	Environmental Engineering	Howard S. Peavy	2015	Civil

Authors table:	Alias name is "A"

author_id	author_name
1	Thomas H. Cormen
2	Stephen J. Chapman
3	Paul Horowitz
4	R.C. Hibbeler
5	George F. Limbrunner
6	Hector Garcia-Molina
7	Adel S. Sedra
8	Alan V. Oppenheim
9	Yunus A. Cengel
10	Russell C. Hibbeler
11	James F. Kurose
12	J. Duncan Glover
13	David Money Harris
14	Ferdinand P. Beer
15	Donald P. Coduto
16	Stuart Russell
17	Robert L. Boylestad
18	Norman S. Nise
19	Frank M. White
20	C. Jotin Khisty
21	Abraham Silberschatz
22	John G. Proakis
23	Charles K. Alexander
24	William D. Callister
25	Daniel J. Findley
26	Michael T. Goodrich
27	Edward Ashford Lee
28	Muhammad H. Rashid
29	Daniel J. Inman
30	Howard S. Peavy

Members table: Alias name is "M"

member_id	member_name	address	email	phone_number
1	Neha Sharma	123 Main Street, Mumbai	neha.sharma@gmail.com	+91 9876543210
2	Rajesh Patel	456 Park Avenue, Delhi	rajesh.patel@gmail.com	+91 9876543211
3	Priya Verma	789 Central Road, Kolkata	priya.verma@gmail.com	+91 9876543212
4	Sanjay Singh	246 Street Lane, Chennai	sanjay.singh@gmail.com	+91 9876543213
5	Aishwarya Reddy	135 Green Garden, Bengaluru	aishwarya.reddy@gmail.com	+91 9876543214
6	Arjun Gupta	789 Pearl Street, Hyderabad	arjun.gupta@gmail.com	+91 9876543215
7	Anjali Desai	456 Rose Avenue, Mumbai	anjali.desai@gmail.com	+91 9876543216
8	Rakesh Sharma	123 Sunshine Road, Delhi	rakesh.sharma@gmail.com	+91 9876543217
9	Deepika Patel	789 Silver Square, Kolkata	deepika.patel@gmail.com	+91 9876543218
10	Abhishek Verma	456 Diamond Lane, Chennai	abhishek.verma@gmail.com	+91 9876543219
11	Sneha Singh	246 Gold Garden, Bengaluru	sneha.singh@gmail.com	+91 9876543220
12	Rahul Kumar	135 Platinum Road, Hyderabad	rahul.kumar@gmail.com	+91 9876543221
13	Pooja Shah	789 Sapphire Street, Mumbai	pooja.shah@gmail.com	+91 9876543222
14	Manish Joshi	456 Emerald Avenue, Delhi	manish.joshi@gmail.com	+91 9876543223
15	Shweta Gupta	123 Pearl Lane, Kolkata	shweta.gupta@gmail.com	+91 9876543224
16	Vikram Deshmukh	789 Rose Garden, Chennai	vikram.deshmukh@gmail.com	+91 9876543225
17	Ananya Reddy	246 Green Road, Bengaluru	ananya.reddy@gmail.com	+91 9876543226
18	Prakash Verma	135 Skyline Avenue, Hyderabad	prakash.verma@gmail.com	+91 9876543227
19	Natasha Sharma	789 Sunrise Square, Mumbai	natasha.sharma@gmail.com	+91 9876543228
20	Rohit Patel	456 Sunset Lane, Delhi	rohit.patel@gmail.com	+91 9876543229

Loans table: | | **Alias name is "L"**

loan_id	member_id	book_id	loan_date	return_date
1	5	3	2022-05-10	2022-05-25
2	10	7	2022-05-12	2022-05-28
3	2	1	2022-05-15	2022-05-30
4	7	5	2022-05-20	2022-06-05
5	12	10	2022-05-25	2022-06-10
6	3	2	2022-06-01	2022-06-16
7	16	9	2022-06-05	2022-06-20
8	10	6	2022-06-08	2022-06-23
9	2	4	2022-06-12	2022-06-27
10	7	8	2022-06-15	2022-06-30
11	14	14	2022-06-18	2022-07-03
12	1	12	2022-06-21	2022-07-06
13	4	11	2022-06-24	2022-07-09
14	6	3	2022-06-27	2022-07-12
15	8	16	2022-06-30	2022-07-15
16	2	18	2022-07-03	2022-07-18
17	11	20	2022-07-06	2022-07-21
18	13	13	2022-07-09	2022-07-24
19	7	15	2022-07-12	2022-07-27
20	5	19	2022-07-15	2022-07-30
21	2	6	2022-07-18	2022-08-02
22	7	2	2022-07-21	2022-08-05
23	12	10	2022-07-24	2022-08-08
24	3	9	2022-07-27	2022-08-11
25	10	4	2022-07-30	2022-08-14
26	16	7	2022-08-02	2022-08-17
27	10	3	2022-08-05	2022-08-20
28	2	8	2022-08-08	2022-08-23
29	7	11	2022-08-11	2022-08-26
30	14	1	2022-08-14	2022-08-29

Reservations table: **Alias name is "R"**

reservation_id	member_id	book_id	reservation_date
1	5	3	2022-05-05
2	10	7	2022-05-10
3	2	1	2022-05-12
4	7	5	2022-05-18
5	12	10	2022-05-20
6	3	2	2022-05-25
7	16	9	2022-06-01
8	10	6	2022-06-06
9	2	4	2022-06-09
10	7	8	2022-06-12
11	14	14	2022-06-15
12	1	12	2022-06-18
13	4	11	2022-06-22
14	6	3	2022-06-26
15	8	16	2022-06-28
16	2	18	2022-07-01
17	11	20	2022-07-03
18	13	13	2022-07-06
19	7	15	2022-07-09
20	5	19	2022-07-11
21	2	6	2022-07-15
22	7	2	2022-07-17
23	12	10	2022-07-20
24	3	9	2022-07-22
25	10	4	2022-07-25
26	16	7	2022-07-28
27	10	3	2022-08-01
28	2	8	2022-08-03
29	7	11	2022-08-06
30	14	1	2022-08-09