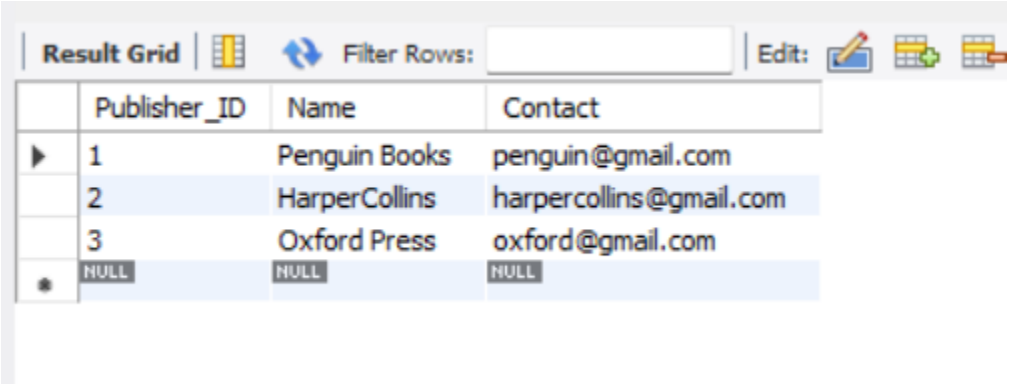
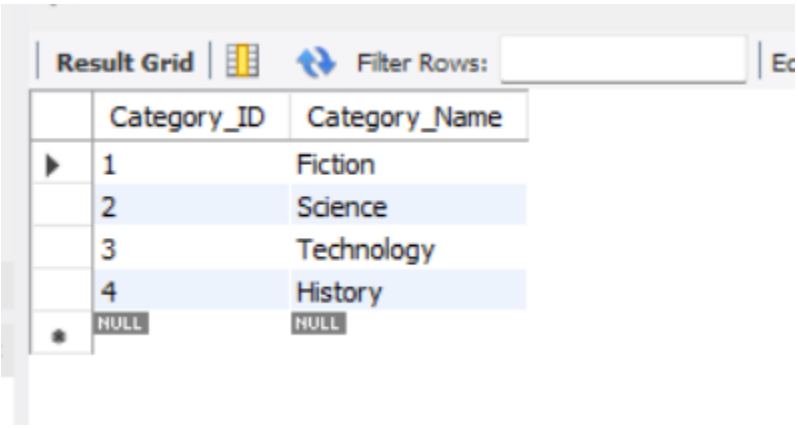
SCREENSHOTS OF SQL TABLES :



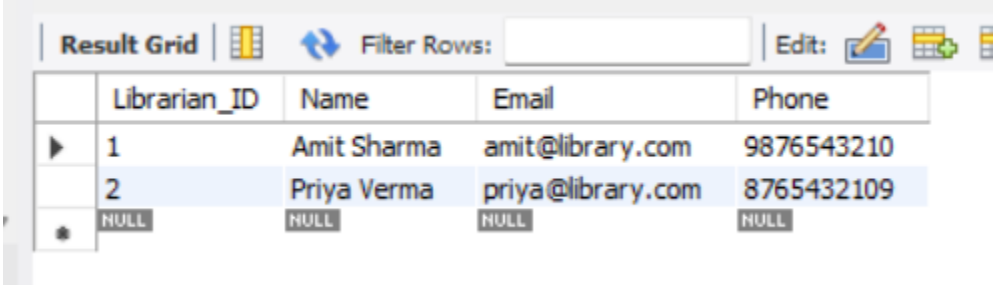
Result Grid | Filter Rows: | Edit:

Publisher_ID	Name	Contact
1	Penguin Books	penguin@gmail.com
2	HarperCollins	harpercollins@gmail.com
3	Oxford Press	oxford@gmail.com
NULL	NULL	NULL



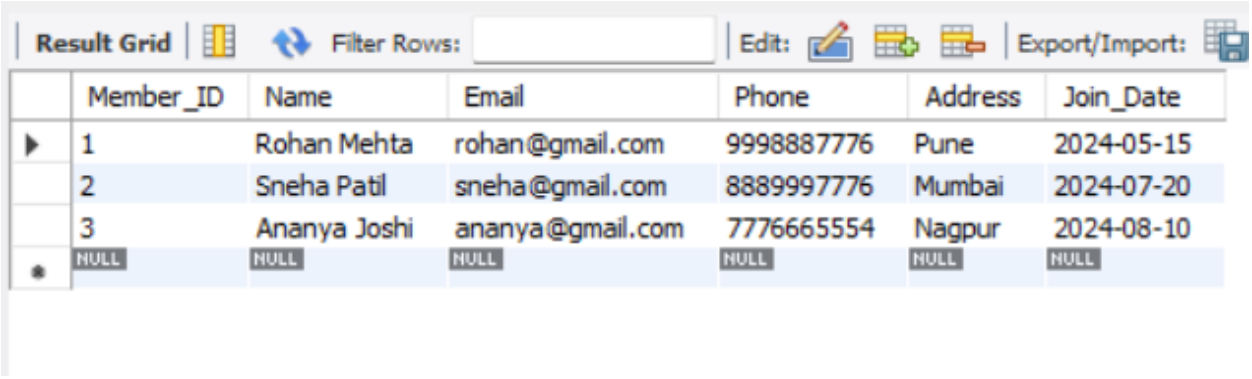
Result Grid | Filter Rows:

Category_ID	Category_Name
1	Fiction
2	Science
3	Technology
4	History
NULL	NULL



Result Grid | Filter Rows: | Edit:

Librarian_ID	Name	Email	Phone
1	Amit Sharma	amit@library.com	9876543210
2	Priya Verma	priya@library.com	8765432109
NULL	NULL	NULL	NULL



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

Member_ID	Name	Email	Phone	Address	Join_Date
1	Rohan Mehta	rohan@gmail.com	9998887776	Pune	2024-05-15
2	Sneha Patil	sneha@gmail.com	8889997776	Mumbai	2024-07-20
3	Ananya Joshi	ananya@gmail.com	7776665554	Nagpur	2024-08-10
NULL	NULL	NULL	NULL	NULL	NULL

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

Book_ID	Title	Author	Publisher_ID	ISBN	Total_Copies	Available_Copies
1	The Time Machine	H.G. Wells	1	ISBN001	5	5
2	Atomic Habits	James Clear	2	ISBN002	8	8
3	Python Programming	John Zelle	3	ISBN003	6	6
4	World History	J. Warner	3	ISBN004	4	4
NULL	NULL	NULL	NULL	NULL	NULL	NULL

Result Grid | Filter Rows:

Book_ID	Category_ID
1	1
2	1
3	3
4	4
NULL	NULL

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

Borrow_ID	Book_ID	Member_ID	Librarian_ID	Issue_Date	Due_Date	Return_Date	Fine
1	1	1	1	2024-10-01	2024-10-15	2024-10-12	0.00
2	2	2	1	2024-10-10	2024-10-25	NULL	0.00
3	3	3	2	2024-09-15	2024-09-30	2024-10-02	50.00
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Explanation :

The Data Insertion and Normalization process ensures that the Library Management System database is well-structured and efficient.
Sample data was inserted into all tables — including Publisher, Category, Member, Book, Librarian, and Borrow — to demonstrate how the system stores and links real-world information.

The database follows Third Normal Form (3NF), which means:

- Each table contains atomic values with no repeating groups.
- All non-key attributes depend directly on the primary key.
- There are no transitive dependencies, ensuring data consistency and minimal redundancy.

This normalization improves data accuracy, flexibility, and performance, making the database reliable for future operations like searching, joining, and reporting.