📚Library Database Schema

This repository contains a relational database schema for a **Library Management System**, written in standard SQL. It includes `CREATE TABLE` and `INSERT INTO` statements to set up and populate the database with sample data.

🗂️Features

- Structured schema with 7 normalized tables:
- `Authors`
- `Categories`
- `Books`
- `BookAuthors` (many-to-many junction table)
- `Members`
- `Librarians`
- `Loans`
- Proper use of **primary and foreign keys**
- Realistic **sample data** for testing and demonstration

📄File Structure

```
library-database-schema/
│
├── library_schema.sql   # SQL script with CREATE TABLE and INSERT statements
└── README.md            # Project documentation
```

🛠️How to Use

1. Clone or download the repository:

   ```
   git clone https://github.com/your-username/library-database-schema.git
   ```

2. Open the `library_schema.sql` file in your SQL editor or IDE (e.g., MySQL Workbench, pgAdmin, SQLite Studio).
3. Run the entire script to:
4. Create all tables
5. Populate them with sample records

🧪 Sample Data Highlights

- **Books:** 4 books across 3 categories
- **Authors:** 4 authors linked to respective books
- **Members:** 3 registered library members
- **Loans:** Example loan records with return dates

🗒️ Example Query

Want to see all books currently loaned?

```
SELECT b.Title, m.Name AS BorrowedBy
FROM Loans l
JOIN Books b ON l.BookID = b.BookID
JOIN Members m ON l.MemberID = m.MemberID
WHERE l.ReturnDate IS NULL;
```

📬 Contact

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