

**Assignment 2:** Design a database schema for a library system, including tables, fields, and constraints like NOT NULL, UNIQUE, and CHECK. Include primary and foreign keys to establish relationships between tables.

Basic schema for a library system:

1. Table: Authors

- Fields:
  - author\_id (Primary Key, Integer)
  - author\_name (Text, NOT NULL)

2. Table: Books

- Fields:
  - book\_id (Primary Key, Integer)
  - title (Text, NOT NULL)
  - isbn (Text, UNIQUE, NOT NULL)
  - author\_id (Foreign Key referencing Authors.author\_id)

3. Table: Members

- Fields:
  - member\_id (Primary Key, Integer)
  - member\_name (Text, NOT NULL)
  - email (Text, UNIQUE, NOT NULL)
  - phone\_number (Text)

4. Table: Borrowed

- Fields:
  - borrow\_id (Primary Key, Integer)
  - book\_id (Foreign Key referencing Books.book\_id)
  - member\_id (Foreign Key referencing Members.member\_id)
  - loan\_date (Date, NOT NULL)
  - return\_date (Date)