PROBLEM LAB 4

The ER diagram for the Online Library Management System consists of the following entities, attributes, and relationships:

- **Entities**:
    1. **Books**
    2. **Users**
    3. **BookLoans**
- **Attributes**:
    - **Books**:
        - ISBN (Primary Key)
        - Title
        - Author
        - Genre
        - Published Year
        - Quantity Available
    - **Users**:
        - UserID (Primary Key)
        - Full Name
        - Email Address
        - Membership Date
    - **BookLoans**:
        - LoanID (Primary Key)
        - UserID (Foreign Key referencing Users)
        - ISBN (Foreign Key referencing Books)
        - LoanDate
        - ReturnDate
        - Status

- **Relationships**:
    0. A **User** can borrow multiple **Books**, but each **BookLoan** is associated with one **User** (one-to-many relationship between Users and BookLoans).
    1. A **Book** can be loaned multiple times, but each **BookLoan** is associated with one **Book** (one-to-many relationship between Books and BookLoans).

books

- 🔑 isbn character varying(13)
- title character varying(255)
- author character varying(255)
- genre character varying(50)
- publishedyear integer
- quantityavailable integer

users

- 🔑 userid serial
- fullname character varying(255)
- ① emailaddress character varying(255)
- membershipdate date

bookloans

- 🔑 loanid serial
- userid integer
- isbn character varying(13)
- loandate date
- returndate date
- status character varying(50)