Platform: Infinity Free

Library Management System

A public library wants to digitize its operations by developing a database system to manage books, members, and loans. The system should allow the library to keep track of the books they have in stock, the members who borrow them, and the loan details. As a database administrator, you are tasked with creating the necessary database and tables to support the system.

Requirements:

1. **Books Management**
   The library needs to store information about the books available. Each book should have the following details:
   - `BookID` (Unique identifier for each book)
   - `Title` (Title of the book)
   - `Author` (Name of the author)
   - `PublicationYear` (Year of publication)
   - `ISBN` (Unique book identifier)
   - `Category` (Category or genre of the book)
   - `CopiesAvailable` (Number of copies available in the library)

2. **Members Management**
   The system must maintain information about the library members:
   - `MemberID` (Unique identifier for each member)
   - `FirstName` (First name of the member)
   - `LastName` (Last name of the member)
   - `Email` (Contact email)
   - `PhoneNumber` (Contact number)
   - `MembershipDate` (Date the member registered)

3. **Loan Transactions**
   The system should track which members have borrowed which books and the loan details:
   - `LoanID` (Unique identifier for each loan)
   - `LoanDate` (Date the book was borrowed)
   - `ReturnDate` (Date the book was returned)

Task:

- **Create a database** called `LibraryDB`.

- **Create three tables**: `Books`, `Members`, and `Loans` based on the requirements above.
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Rubrics

Criteria Description Points

Criteria	Points
Books (10 Points)	0-10
Members (10 Points)	0-10
Loan (10 Points)	0-10
Requirements (10 Points)	0-10

Total Points: 40

Point Distribution:

- **0-5 Points**: Minimal implementation, missing key components.
- **6-8 Points**: Basic implementation, but lacks some details or relationships.
- **9-10 Points**: Complete and accurate implementation, meeting all requirements effectively.