

LIBRARY DATABASE DESIGN

books		
Attribute	Constraints	Data Type
book_id	Primary Key	Serial
ISBN	Unique , Not Null	Varchar(13)
book_title	Not Null	Varchar(200)
author_name	Not Null	Varchar(200)
available	Not Null	Boolean
genre	Not Null	Varchar(100)
publisher_name	Unique , Not Null	Text
publish_year	Not Null	Small Integer

authors		
Attribute	Constraints	Data Type
author_id	Primary Key	Serial
full_name	Not Null	Varchar(200)

book_authors		
Attribute	Constraints	Data Type
author_id	Foreign Key	Integer
book_id	Foreign Key	Integer

members		
Attribute	Constraints	Data Type
member_id	Primary Key	Serial
full_name	Not Null	Varchar(200)
address	Not Null	Text
phone	Unique , Not Null	Varchar (50)
email	Unique , Not Null	Varchar (320)
member_date	Not Null	Timestamp
member_type	Not Null	Varchar(100)

loan		
Attribute	Constraints	Data Type
branch_id	Foreign Key , Not Null	Integer
member_id	Foreign Key , Not Null	Integer
book_id	Foreign Key , Not Null	Integer
loan_date	Not Null	Date
due_date	Not Null	Date
return_date		Date

publishers		
Attribute	Constraints	Data Type
publisher_id	Primary Key	Serial
publisher_name	Unique , Not Null	Text
address	Not Null	Varchar(250)
phone	Unique , Not Null	Varchar(50)

branches		
Attribute	Constraints	Data Type
branch_id	Primary Key	Serial
branch_name	Not Null	Text
address	Not Null	Varchar(250)
phone	Unique , Not Null	Varchar(50)

employees		
Attribute	Constraints	Data Type
employee_id	Primary Key	Serial
employee_full_name	Not Null	Varchar(200)
salary	Not Null	Integer
phone	Unique , Not Null	Varchar(50)
email	Unique , Not Null	Varchar (320)
position	Not Null	Varchar(200)

book_inventory		
Attribute	Constraints	Data Type
Book_id	Foreign Key , Not Null	Integer
Branch_id	Foreign Key , Not Null	Integer
No_of_copy	Not Null	Small Integer

