

Assignment 1

Question: You are provided with a table from a relational database used to manage a library's data. The table is named "LibraryRecords" and it contains the following columns:

RecordID (Unique identifier for each record)

BookID (Unique identifier for each book)

BookTitle

BookAuthor

BorrowerID (Unique identifier for each borrower)

BorrowerName

BorrowerAddress

BorrowDate

ReturnDate

RecordID	BookID	BookTitle	BookAuthor	BorrowerID	BorrowerName	BorrowerAddress	BorrowDate	ReturnDate
1	B1	To Kill a Mockingbird	Harper Lee	BR1	John Doe	123 Main St	01/01/2023	01/08/2023
2	B2	1984	George Orwell	BR2	Jane Smith	456 Oak Ave	02/01/2023	02/08/2023
3	B1	To Kill a Mockingbird	Harper Lee	BR3	Bob Johnson	789 Pine Rd	03/01/2023	03/08/2023
4	B3	The Great Gatsby	F. Scott Fitzgerald	BR1	John Doe	123 Main St	04/01/2023	04/08/2023
5	B2	1984	George Orwell	BR2	Jane Smith	456 Oak Ave	05/01/2023	05/08/2023

Your task is to normalize this table into 1st Normal Form (1NF), 2nd Normal Form (2NF), and 3rd Normal Form (3NF). Create and name the necessary tables, list the fields for each table, and define the primary and foreign keys where necessary.

Present your answer using Excel/Google Sheets. The table(s) in 1NF should be presented first, followed by the table(s) in 2NF, and finally the table(s) in 3NF.

Note: Assume that each book can be borrowed by multiple borrowers over time, and each borrower can borrow multiple books.