

**1 NF:** There is multivalued, so the table was separated into multiple tables

Borrower Table			
<u>Borrow_id</u>	Member_name	Member_phone	Borrow_date
201	Ali Hassan	9876543210	2025-01-10
202	Fatima Noor	9871234560	2025-01-12

Book Table			
<u>Book_ID</u>	Book_Title	Author_Name	Author_Nationality
B101	Database Systems	Ramez Elmasri	USA
B205	Data Science	Joel Grus	USA
B305	Python Basics	Mark Lutz	UK

Transaction Table			
<u>Borrow_ID</u>	<u>Book_ID</u>	Return_Date	Fine_Amount
201	B101	2025-01-20	0
202	B205	2025-01-25	5
201	B305	2025-01-22	2

**2 NF:** The Return\_Date and Fine\_Amount have a total relationship with Borrow\_ID and Book\_ID, therefore, there is no need for 2NF

**3 NF:** There is transitive dependency which is the Author\_Name and Author\_Nationality

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Author Table	
<u>Author_Name</u>	Author_Nationality
Ramez Elmasri	USA
Joel Grus	USA
Mark Lutz	UK

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