

Illustrate the problem of M-to-M relationship  
--> this motivates adding composite entities in the logical modelling

Suppose only one book per borrow

**Member**  
PK

member_id	member_name	phone
1	Alice	123-456-789
2	Ben	123-456-790
3	Carl	123-456-791
4	Denny	123-456-792

**Borrow**  
PK                    FK                    FK

borrow_id	borrow_date	member_id	book_id
1001	2025-11-25	2	101
1002	2025-12-25	1	101
1003	2025-12-28	4	102

**Book**  
PK

book_id	title	author	ISBN_nr	copy_nr
101	How to Solve It	George polya	978-0140124996	1
102	How to Solve It	George polya	978-0140124996	2
103	Cozy & Calm. En cozy målarbok	Sam Jayne	978-9181161113	1
104	Designing Data-Intensive Applications	Martin Kleppmann	978-1449373320	1

Possibly multiple books per borrow  
(which is more realistic)  
--> PK is not unique!

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1003	2025-12-28	4	102
1004	2025-12-30	1	103
1004	2025-12-30	1	104

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This alternative solution will break the FK constraint

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The solution is to introduce a composite entity to break the M-to-M relationship between Book and Borrow