

Member table

MemberID	LoanID
1	1
2	1
3	1
...	...

Loans table

LoanID	MemberID
500202	955
500203	955
500204	955
...	...

From Member to Loans

- 1- Minimum cardinality: One member has 0 to 1 loan.
- 2- Maximum cardinality: One member has 1 or many loans

From Loans to Member

- 3- Minimum cardinality: One loan has 0 to 1 member
- 4- Maximum cardinality: One loan has 1 or many members

Book Return table

ReturnID	LoanID
345	99
346	99
347	99
...	...

Loans table

LoanID	ReturnID
500202	78787878
500203	78787878
500204	78787878
...	...

From Book Return to Loans

- 1- Minimum cardinality: one book return can have 0 or 1 loan
- 2- Maximum cardinality: one book return can have 1 or many loans

From Loans to Book Return

- 3- Minimum cardinality: one loan can have 0 or 1 book copy
- 4- Maximum cardinality: one loan can have 1 or many book copies

Book copy table

CopyID	LoanID
670	1
671	1
672	1
...	...

Loans table

LoanID	CopyID
500202	955
500203	955
500204	955
...	...

From Book copy to Loans

- 1- Minimum cardinality: One book copy has 0 or 1 loan
- 2- Maximum cardinality: One book copy has 1 or many loans

From Loans to Book copy

- 3- Minimum cardinality: One loan has 0 or 1 book copy
- 4- Maximum cardinality: One loan has 1 or many book copies

Book copy table

CopyID	ReservationID
1	1
2	1
3	1
...	...

Reservations table

ReservationID	CopyID
500202	955
500203	955
500204	955
...	...

From Book copy to Reservations

- 1- Minimum cardinality: One book copy has 0 or 1 reservation
- 2- Maximum cardinality: One book copy has 1 or many reservations

From Reservations to Book copy

- 3- Minimum cardinality: One reservation has 0 or 1 book copy
- 2- Maximum cardinality: One reservation has 1 or many book copies