

# SQL RELATIONSHIPS EXERCISE

## SQL

**Overview:** In this scenario there are two tables. One for library books and one for members who can check out the books. Each member can check out multiple books at once, but each book can only be checked out by one member at a time. Create the tables and fill them with data.

### Tables:

book	member
id: SERIAL <PK> title: VARCHAR 60 author: VARCHAR 60 checked_out_by_id: INT <FK>	id: SERIAL <PK> name: VARCHAR 40 card_number: CHAR 10

**Execute SQL queries** for the following. Keep the queries in a text file if you like.

1. Create both tables.
2. Add the following rows to the **member** table.
  1. Name: "Annabelle Aster", Card Number: "772-93-110"
  2. Name: "Boris Berceci", Card Number: "000-00-000"
  3. Name: "Carter Corbin", Card Number: "282-09-382"
3. Add the following rows to the **book** table.
  1. Title: "In Search of Lost Time", Author: "Marcel Proust", Checked out by: Annabelle.
  2. Title: "Ulysses", Author: "James Joyce", Checked out by: Annabelle.
  3. Title: "Don Quixote", Author: "Miguel de Cervantes", Checked out by: Carter.
  4. Title: "Moby Dick", Author: "Herman Melville", Not checked out (null).
4. Update the member with the id of 2 to have a card number of "357-15-964".
5. Remove the member with the id of 2.
6. Select all members that have the card number 772-93-110.
7. Select all books sorted by title
8. Annabelle checked out another book... Update Moby Dick to be checked out by Annabelle.
9. Annabelle turned in a book... Update Ulysses to be checked out by no one (null).
10. Write a JOIN that lists all the books and who they're checked out to. Include the books that are not checked out.
11. Write a JOIN that lists the titles of all the books that are checked out to someone named Annabelle Aster (don't just use the ID)
12. Write a JOIN that lists the name and card number of all members who have checked out books by the author Herman Melville.