**Problem:** In a library management system a member may rent many books. One book may be rented by exactly one member. A member is identified by a member number. The system also stores member name and address. A member address is composed of house number, street name and city. A book is identified by book ID. Book name, ISBN Number and edition of a book are also stored. There may be multiple edition of a book. While borrowing, the date of the borrowing and copy number of the book is stored. A member may also reserve many books. A book may be reserved by many members. To find the priority of the reservation the date of making the reservation is also stored. A book is written by at least one author. An author may write many books but the system stores information of those authors of who has written at least one book stored in the library. To identify an author the system stores author ID along with author name. A book belongs to exactly one category and for a category there must be at least one book. Each category has a name and the unique property of each category is a category number.

**A picture containing diagram, sketch, drawing, origami

Description automatically generatedSolution:**