

## 1. Create an ER diagram of the library system explained below

The library contains one or several copies of the same book. Every copy of a book has a copy number and is located at a specific location in a shelf. A copy is identified by the copy number and the ISBN number of the book. Every book has a unique ISBN, a publication year, a title, authors, and a number of pages. Books are published by publishers. A publisher has a name as well as a location. Author has first name, family name and birth date. Within the library system, books are assigned to one or several categories. A category can be a subcategory of exactly one other category. A category has a name and no further properties. Each reader needs to provide his/her family name, his/her first name, his/her city, and his/her date of birth to register at the library. Each reader gets a unique reader number. Readers borrow copies of books. Upon borrowing the return date is stored.

## 2. Mysql exercises

- 2.1 How many students does the Fullstack and Marketing academy together have?
- 2.2 Get all students from the Frontend academy, sorted by last name from lower to higher
- 2.3 How many female students are there in the Data Science academy?
- 2.4 How many Php mentor classes has the instructor Brendan had?
- 2.5 Get the lectures that the instructor Penelope had with difficulty between 1 and 5 in 2019 OR with difficulty between 5 and 10 in 2020?
- 2.6 How many mentor sessions has the student with firstname Caril visited?
- 2.7 List lesson\_id and academy name from lessons where the number of present student was between 6 and 10
- 2.8 List student/s with highest number of participation on lectures.
- 2.9 List academy names who have CSS lessons
- 2.10 How many students haven't learned Bootstrap yet.
- 2.11 List all students who haven't participated on any lecture from Fullstack academy.