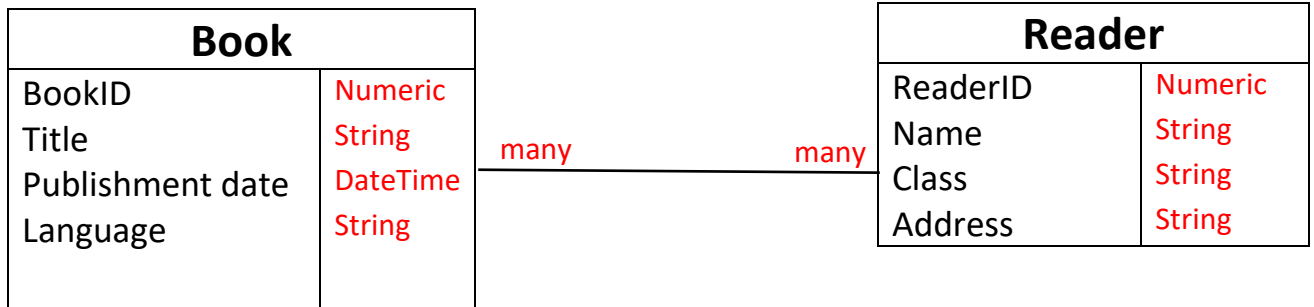


# C1- S4-PRACTICE

## Exercise 1

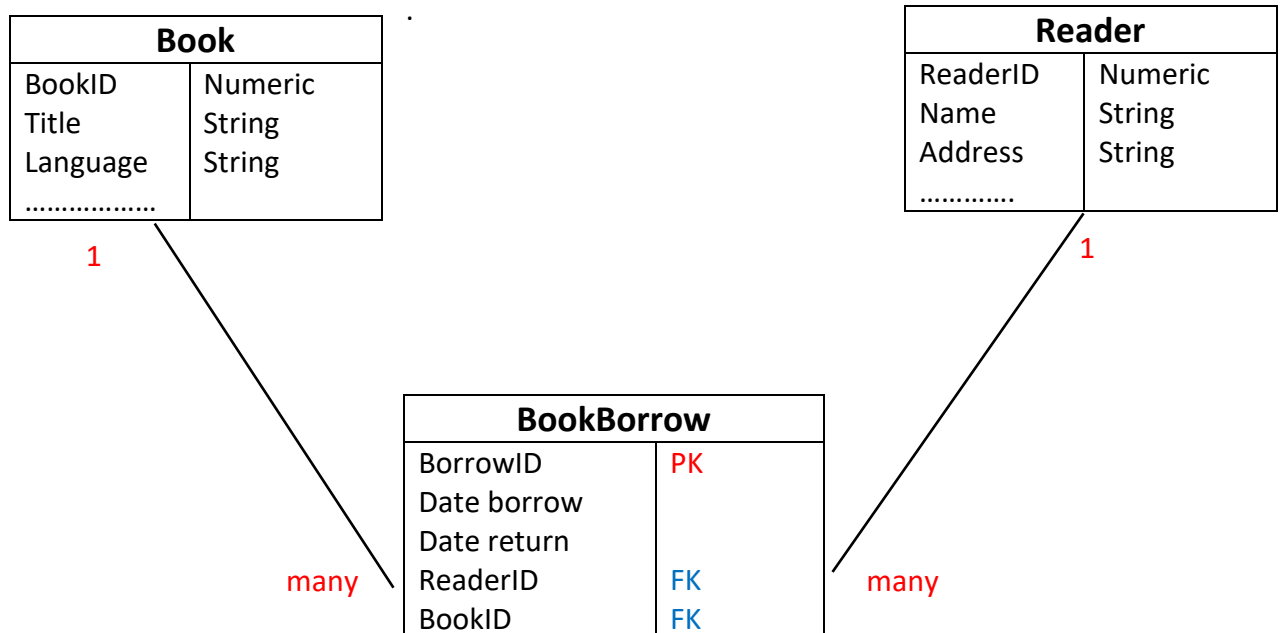
Q1 – Complete the **attributes types** of Book and Read entities (5 points)

Q2 – Complete the **relation** between the Book and Reader entities (5 points)



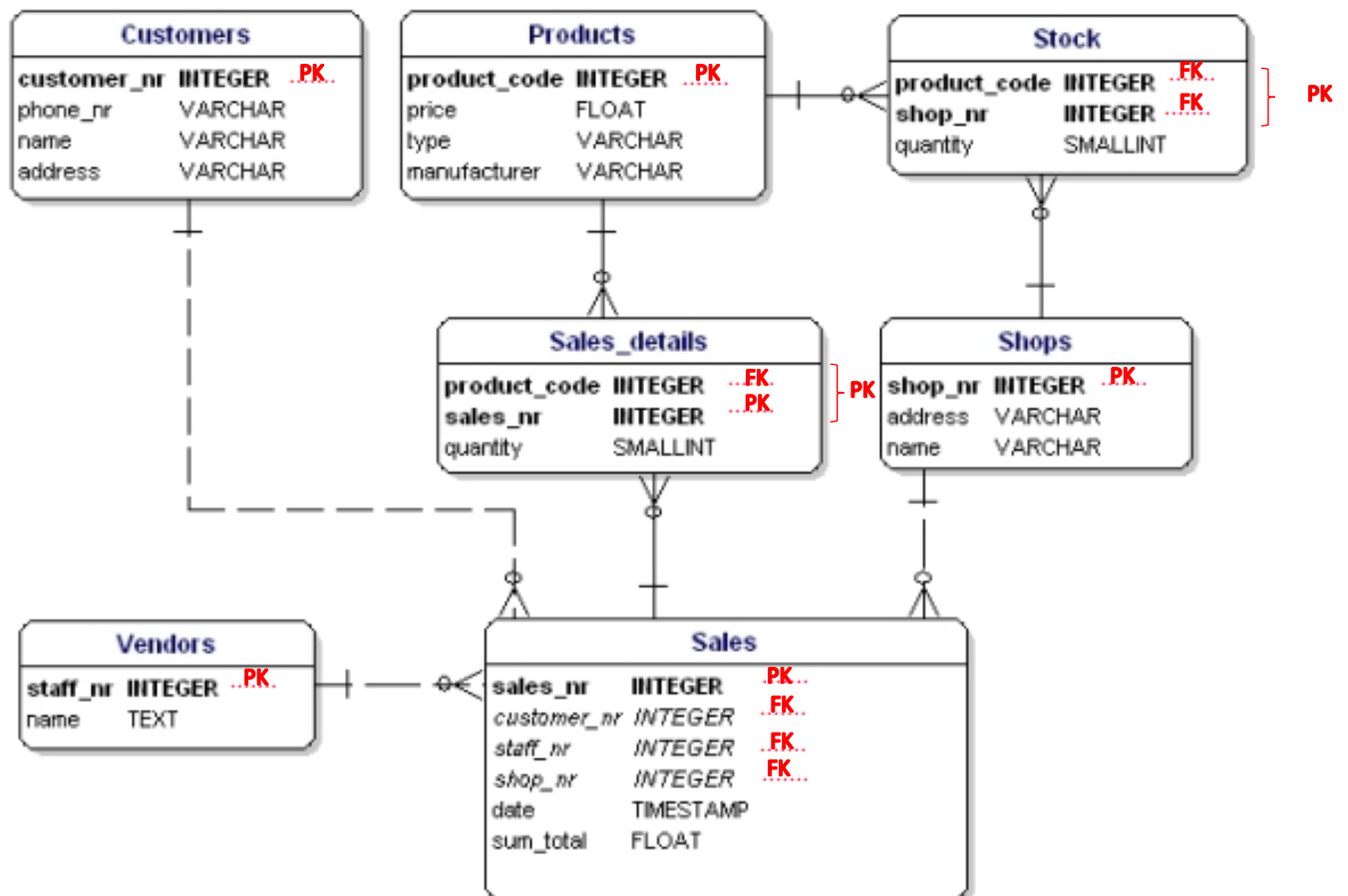
Q3 – We have created an **additional Associative table** to manage the previous relation between the Book and the Reader

⇒ Complete the missing parts!



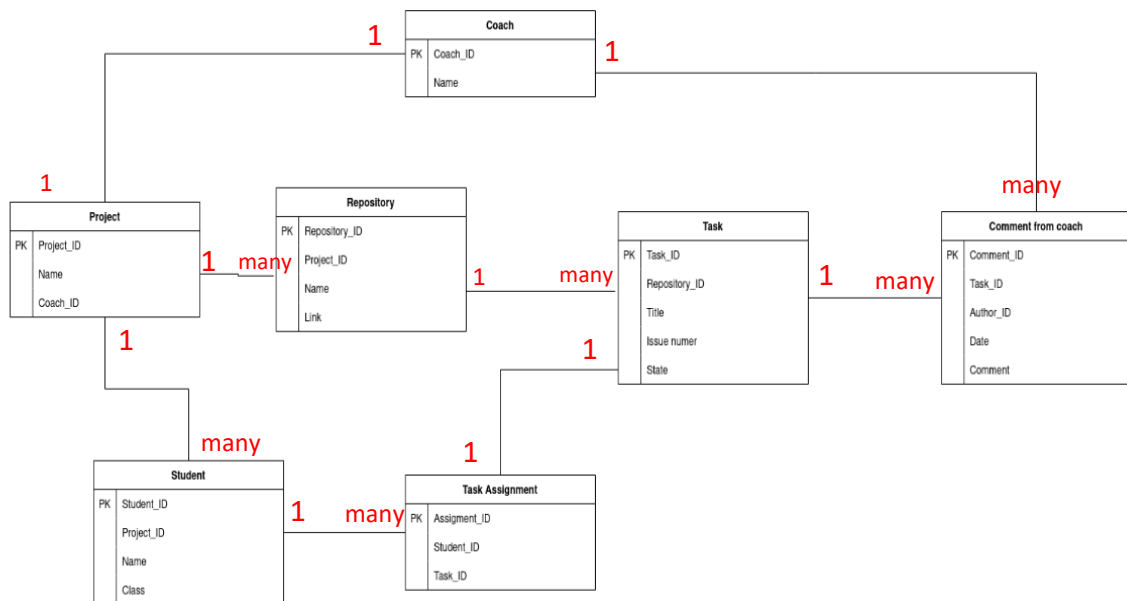
## Exercise 2

Q1: complete the missing part of the model diagram below with PK as the primary or FK foreign key.



### Exercise 3

Q1: Complete the relation between each entity on the database relation model. Take for example the relation between **STUDENTS** and **PROJECTS**.



### Exercise 4

Google Classroom is the tool used to manage PNC classes, where the teacher can assign homework to the students of different classes.

Q1: Complete the attributes types in the following tables

User	
user ID	<b>Numeric</b>
email	<b>String</b>
password	<b>Numeric</b>
name	<b>String</b>
role	<b>String</b>

Classroom	
classroom ID	<b>Numeric</b>
name	<b>String</b>
section	<b>String</b>
subject	<b>String</b>

Assignment	
assignment ID	<b>Numeric</b>
title	<b>String</b>
description	<b>String</b>
deadline	<b>DateTime</b>

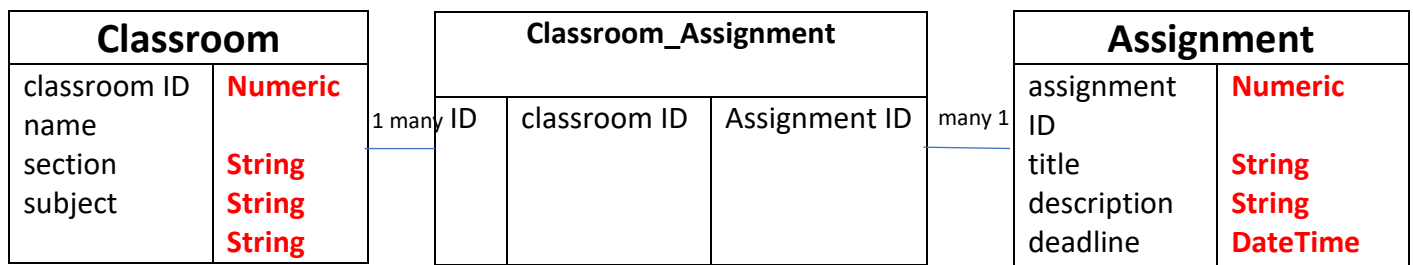
Comment	
comment ID	<b>Numeric</b>
content	<b>String</b>
user ID	<b>Numeric</b>
assignment ID	<b>Numeric</b>

Here are some observations that can help us design the Google Classroom database:

- A user can create many classrooms as a teacher
- A user can join many classrooms as a student
- A classroom can have many teachers
- A classroom can have many students
- A teacher can post many assignments in a classroom, and the same assignment can be posted in several classrooms
- An assignment post can have many comments from students or teachers

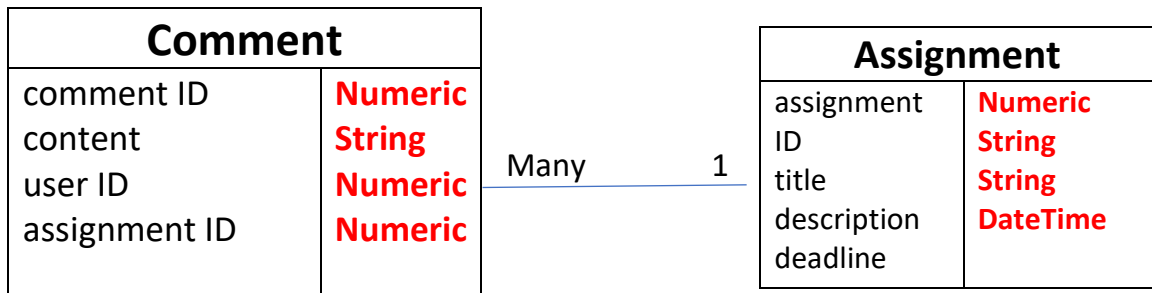
## Q2 CLASSROOM and ASSIGNMENT

1. Type of relation: *one to one, one to many, many to many?*
  - **Many to many**
2. Do you need to create an intersection table? Why?
  - **Yes, I do. because it's many to many relationships.**
3. Create the ERD representing to represent those 2 entities and their relation



## Q3: COMMENT and ASSIGNEMENT

1. Type of relation: *one to one, one to many, many to many*
  - One to many
2. Do you need to create an intersection table or not? Why?
  - No, I don't. Because it's one to many relationships.
3. Update the previous ERD to represent those 2 entities and their relation



**Q4: COMMENT and USER**

1. Type of relation: *one to one, one to many, many to many?*
  - One to many
2. Do you need to create an intersection table or not? Why?
  - No, I don't. Because it's one to many relationships.
3. Update the previous ERD to represent those 2 entities and their relation

