

DB-C1-S2-Practice-Correction

Problem 1: Let's manage a Library relational database

!! We only consider books that are written by only one author

Exercise 1: Data types

Instructions: Complete the data types of the attributes of the **book** table model.

BOOK	
Book ID	Numeric
Title	String
Publishment date	Date
Language	String

Exercise 2: Table schema

Instructions: From the **Author** table below, design the **Author** table model (check the Theory class or ask the teacher to remember what is the model of a table).

Author	
Author ID	Numeric
Name	String
Date of birth	Date
Country	String

Author ID	Name	Date of birth	Country
XXX	XXX	XXX	XXX
XXX	XXX	XXX	XXX
XXX	XXX	XXX	XXX

Exercise 3: Instances of a table

Instructions:

- 1- By looking on the internet, complete the Book table with at least 3 examples (there are different answers possible)

Book ID	Title	Publishment Date	Language
01	Rich Dad Poor Dad	01 1997	English
02	The Bitcoin Standard	02 Mar 28, 2018	English
03	A Promised Land	03 Nov 17, 2020	English

- 2- Complete the Author table with the information of the authors of the book you find on the internet

Author ID	Name	Date of birth	Country
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01	Chuon Nath	Mar 11, 1883	Cambodia
02	William Faulkner	02 Sep 25, 1897	America
03	Victor Hugo	Feb 26, 1802	French

Exercise 4: Relation between Books & Author

Instructions:

- 1- Answer to the question: by looking to the theory class, write how we can make the relation between the Book table and the Author table. Ask your teacher if it is right.

We can make the relation between the Book table and the Author table by Author ID.

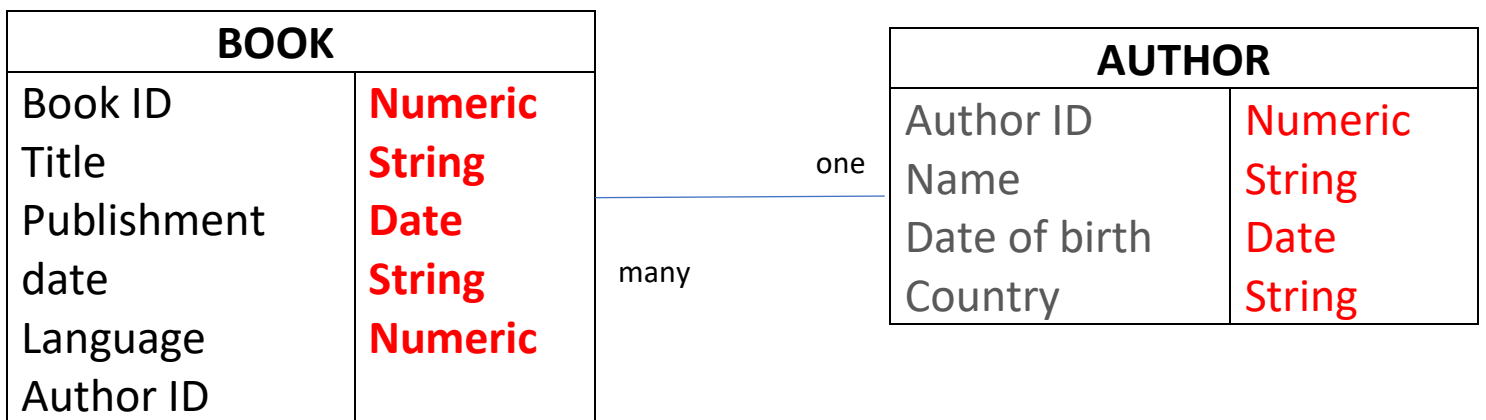
- 2- Update the Book table by adding a column to put the relation between the Book table and the Author table.

Book ID	Title	Publishment Date	Language	Author ID

3- Update the Books model

BOOK	
Book ID	Numeric
Title	String
Publishment date	Date
Language	String
Author ID	Numeric

4- Update the Book and Author model (use drawing in Word)



Problem 2: Let's manage a Movie relational database

!! We only consider movies that are directed by only one director

Exercise 1: Data types

Instructions: Complete the data types of the attributes of the **movie** table model.

MOVIE	
Movie ID	Numeric
Title	String
Release Year	Date
Movie Length	Numeric

Exercise 2: Table schema

Instructions: From the **Director** table below, design the **Director** table model (check the Theory class or ask the teacher to remember what is the model of a table).

Director	
Director ID	Numeric
Name	String
Date of birth	Date
Country	String

Director ID	Name	Date of birth	Country
XXX	XXX	XXX	XXX
XXX	XXX	XXX	XXX
XXX	XXX	XXX	XXX

Exercise 3: Instances of a table

Instructions:

- 1- By looking on the internet, complete the Movie table with at least 3 examples (there are different answers possible)

Movie ID	Title	Release Date	Movie Length
	The Godfather	1972	2h
	Rear Window	1954	2h
	Vertigo	1958	2h

2- Complete the Authors table with the information of the authors of the book you find on the internet

Director ID	Name	Date of birth	Country
1	Bong Joon-ho	September 14, 1969	South Korean
2	Steven Spielberg	December 18, 1946	USA
3	Martin Scorsese	November 17, 1942	USA

Exercise 4: Relation between Movie & Director

Instructions:

1- Answer to the question: by looking to the theory class, write how we can make the relation between the Movie table and the Director table. Ask your teacher if it is right.

We can make the relation between the Book table and the Author table by Director ID.

2- Update the Movie table by adding a column to put the relation between the Movie table and the Director table.

Movie ID	Title	Release Date	Movie Length	Director ID

3- Update the Movie table schema

MOVIE	
Movie ID	Numeric
Title	String
Release date	Date
Movie length	String
Director ID	

4- Update the Movie and Director model (use drawing in Word)

