

(THIS DOCUMENT IS FOR HW#3 PARTS 3, 4, AND 5)

3.)

Books

Columns	Key	Nullable	Data Type	Foreign Key	Multi/Derived
isbn	PK	N	Varchar(13)		N
title		N	Text		N
publisher_date		N	Date		N
chapter_count		N	Integer		N
page_count		N	Integer		N
rating		Y	Integer		N
series_id		Y	Serial	series.id	N
edition		Y	Text		N
publisher_id		N	Serial	publisher.id	N

books_genres

Columns	Key	Nullable	Data Type	Foreign Key	Multi/Derived
isbn	PK(isbn,genre)	N	Varchar(13)	book.isbn	N
genre	PK(isbn,genre)	N	Serial	genre.id	N

books_authors

Columns	Key	Nullable	Data Type	Foreign Key	Multi/Derived
isbn	PK(isbn,author)	N	Varchar(13)	book.isbn	N
author	PK(isbn,author)	N	Serial	author.id	N

Series

Columns	Key	Nullable	Data Type	Foreign Key	Multi/Derived
id	PK	N	Serial		N
title		N	Text		N

Genre

Columns	Key	Nullable	Data Type	Foreign Key	Multi/Derived
id	PK	N	Serial		N
type		N	Text		N

Author

Columns	Key	Nullable	Data Type	Foreign Key	Multi/Derived
id	PK	N	Serial		N
first_name		N	Text		N
middle_name		Y	Text		N
last_name		N	Text		N
gender		N	Text		N

Publisher

Columns	Key	Nullable	Data Type	Foreign Key	Multi/Derived
id	PK	N	Serial		N
name		N	Text		N
location		N	Text		N

4.)

Cardinality:

- Books — N:N — Authors
- Books — N:N — Genres
- Books — N:1 — Publisher
- Books — 1:(0-1) — Series

Participation:

- Books — Total — Authors
- Books — Total — Genres
- Books — Total — Publisher
- Books — Optional — Series

5.) Queries:

(1.) Give the First and Last name of the authors of books that are part of a series

Answer is 3 rows:

First_name	Last_name
Joanne	Rowling
Susan	Collins
William	Shakespeare

(2.) List the ISBN and Title of books that are not part of a series

Answer is 3 rows:

ISBN	Title
9780451526342	Animal Farm
9780135957059	The Pragmatic Programmer: Your Journey To Mastery
9780553214208	From the Earth to the Moon

(3.) List the title and publishing date of books sorted by publishing dates from earliest to latest

Answer is 7 rows:

Title	Publishing date
From the Earth to the Moon	1993
Harry Potter and the Philosopher's Stone	1997
Harry Potter and the Goblet of Fire	2000
Animal Farm	2004
Romeo and Juliet	2004
The Hunger Games	2008
The Pragmatic Programmer: Your Journey To Mastery	2019

(4.) List the Title of Books published after 1990 in the Technology genre

Answer is 1 row:

Title
The Pragmatic Programmer: Your Journey To Mastery

(5.) List the Name of Publishers of Books which are in the Technology genre

Answer is 1 row:

Name
Addison-Wesley Professional

(6.) List the First Name and Last Name of Authors of Political Satire Books

Answer is 1 row:

First Name	Last Name
George	Orwell

(7.) List the Title of Books with more than 200 Pages that are in the Fantasy genre

Answer is 2 rows:

Title
Harry Potter and the Philosopher's Stone
Harry Potter and the Goblet of Fire

(8.) List the Genres from the number of books from most to least

Answer is 5 rows:

Name
Science Fiction
Fantasy
Political Satire
Technology
Romance

(9.) List the Title of all Books From New York-based Publishers

Answer is 4 rows:

Title
‘From the Earth to the Moon’
‘The Hunger Games’
“Animal Farm”
“Romeo and Juliet”

(10.) List the ISBN and title of books with more than 1 author

Answer is 1 row:

ISBN	Title
9780135957059	The Pragmatic Programmer: Your Journey To Mastery