

Exercises: Spring Data Advanced Quering

This document defines the exercise assignments for the ["Spring Data" course @ SoftUni](https://softuni.org).

For the following tasks use the **bookshop_system** database from the previous exercise. Make sure it has proper connections between the tables and it is populated with any sample data.

1. Books Titles by Age Restriction

Write a program that prints **the titles of all books**, for which the **age restriction** matches the given input (minor, teen or adult). **Ignore casing** of the input.

Example

Input	Output
miNor	A che punto Ã la note After Many a Summer Dies the Swan Ah ...
teEN	All Passion Spent Wide Sea Antic Hay ...

2. Golden Books

Write a program that prints **the titles of the golden edition books**, which have **less than 5000 copies**.

Example

Output
Behold the Man Bury My Heart at Wounded Knee The Cricket on the Hearth ...

3. Books by Price

Write a program that prints **the titles and prices of books** with **price lower than 5** and **higher than 40**.

Example

Output
A che punto Ã la note - \$45.78 All the King's Men - \$45.60 An Evil Cradling - \$3.30

Beyond the Mexique Bay - \$45.45

...

4. Not Released Books

Write a program that prints **the titles** of all books that are **NOT released** in a given year.

Example

Input	Output
2000	Absalom A che punto Ã" la note After Many a Summer Dies the Swan ...
1998	A che punto Ã" la note Ah Wilderness! ...

5. Books Released Before Date

Write a program that prints **the title, the edition type and the price** of books, which are **released before a given date**. The date will be in the **format dd-MM-yyyy**.

Example

Input	Output
12-04-1992	All Passion Spent PROMO 7.18 Bury My Heart at Wounded Knee GOLD 3.86 A Catskill Eagle NORMAL 15.78 ...
30-12-1989	Bury My Heart at Wounded Knee GOLD 3.86 Consider the Lilies PROMO 30.89 The Curious Incident of the Dog in the Night-Time NORMAL 23.41 ...

6. Authors Search

Write a program that prints **the names** of those authors, whose **first name ends with a given string**.

Example

Input	Output
e	George Powell

	Jane Ortiz Julie Washington
dy	Randy Morales Randy Graham

7. Books Search

Write a program that prints **the titles of books**, which **contain a given string** (regardless of the casing).

Example

Input	Output
sK	A Catskill Eagle The Daffodil Sky The Skull Beneath the Skin
WOR	Great Work of Time Terrible Swift Sword

8. Book Titles Search

Write a program that prints **the titles of books**, which are **written by authors**, whose **last name starts with a given string**.

Example

Input	Output
Ric	Arms and the Man (Amanda Rice) ... Book Title (Authors first and last name) Check results manually in DB, because we insert random Authors for every books.
gr	Cover Her Face (Brenda Griffin) ... Book Title (Authors first and last name) Check results manually in DB, because we insert random Authors for every books.

9. Count Books

Write a program that prints **the number of books**, whose **title is longer than a given number**.

Example

Input	Output	Comments
12	174	There are 174 books with longer title than 12 symbols

40	2	There are 2 books with longer title than 40 symbols
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10. Total Book Copies

Write a program that prints **the total number of book copies by author**. Order the results **descending by total book copies**.

Example

Output
Randy Graham - 196584
Check results manually in DB, because we insert random Authors for every books.

11. Reduced Book

Write a program that prints **information (title, edition type, age restriction and price)** for a book **by given title**. When retrieving the book information **select only those fields** and **do NOT include any other information** in the returned result.

Example

Input	Output
Things Fall Apart	Things Fall Apart GOLD ADULT 40.02

12. * Increase Book Copies

Write a program that **increases the copies of all books released after a given date with a given number**. Print the total amount of book copies that were added.

Input

- On the **first line** – date in the format **dd MMM yyyy**. If a book is released after that date (exclusively), increase its book copies with the provided number from the second line of the input.
- On the **second line** – number of **book copies** each book should be increased with.

Output

- Total number of books** that was added to the database.

Example

Input	Output	Comments
12 Oct 2005 100	6100	61 books are released after 12 Oct 2005, so total of 6100 book copies were added
06 Jun 2013 44	572	13 books are released after 6 Jun 2013, so total of 572 book copies were added

13. * Remove Books

Write a program that **removes from the database** those **books**, which **copies are lower than a given number**. Print the **number of books that were deleted** from the database.

14. * Stored Procedure

Using Workbench (or other similar tool) **create a stored procedure**, which receives an **author's first and last name** and returns the **total amount of books the author has written**. Then write a **program** that **receives an author's name** and prints the **total number of books** the author has written by **using the stored procedure** you've just created.

Example

Input	Output
Amanda Rice	Amanda Rice has written 9 books Check results manually in DB, because we insert random Authors for every books.
Christina Jordan	{Author first and last name} has writtent {number of books} books
Wanda Morales	{Author first and last name} has writtent {number of books} books