What you need, as suggestions:

[IntelliJ IDEA](https://www.jetbrains.com/idea/), [Postman](https://www.getpostman.com/), [MySQL Workbench](https://www.mysql.com/products/workbench/)

Pre-requirements:

* Java 8
* MySQL
* Hibernate/JPA
* Spring MVC

At the pointed time you should build simple WEB-application to show your knowledge. Try to do as much as you can and keep in mind almost finished app is not finished app!

Data structure:

* Books (id, name, published, genre, rating)
* Authors (id, name, gender, born)
* Book-Author (id, book-id, author-id)

Use data below for free or get your own instead:

**INSERT INTO** `authors` **VALUES** (1, **'Шкляр Василь Миколайович'**, **'male'**, **'1951-06-10'**);

**INSERT INTO** `authors` **VALUES** (2, **'Joshua Bloch'**, **'male'**, **'1961-07-28'**);

**INSERT INTO** `authors` **VALUES** (3, **'Martin Fowler'**, **'male'**, **null**);

**INSERT INTO** `authors` **VALUES** (4, **'Chad Fowler'**, **'male'**, **null**);

**INSERT INTO** `authors` **VALUES** (5, **'J. K. Rowling'**, **'female'**, **'1965-07-31'**);

**INSERT INTO** `authors` **VALUES** (6, **'Dan Brown'**, **'male'**, **'1964-06-22'**);

**INSERT INTO** `authors` **VALUES** (7, **'Suzanne Collins'**, **'female'**, **'1962-08-10'**);

**INSERT INTO** `books` **VALUES** (**'1'**, **'Залишенець. Чорний ворон'**, **null**, **'historical novel'**, **'5'**);

**INSERT INTO** `books` **VALUES** (**'2'**, **'Ключ'**, **'1999-01-01'**, **'novel'**, **'3'**);

**INSERT INTO** `books` **VALUES** (**'3'**, **'Effective Java: Programming Language Guide'**, **'2001-03-02'**, **'technical'**, **'5'**);

**INSERT INTO** `books` **VALUES** (**'4'**, **'Java Concurrency in Practice'**, **'2006-04-23'**, **'technical'**, **'4'**);

**INSERT INTO** `books` **VALUES** (**'5'**, **'Java Puzzlers: Traps, Pitfalls, and Corner Cases'**, **'2005-02-02'**, **'technical'**, **'4'**);

**INSERT INTO** `books` **VALUES** (**'6'**, **'Patterns of Enterprise Application Architecture'**, **'2002-06-25'**, **'technical'**, **'3'**);

**INSERT INTO** `books` **VALUES** (**'7'**, **'Harry Potter and the Philosophers Stone'**, **'1997-06-26'**, **'fantasy'**, **'5'**);

**INSERT INTO** `books` **VALUES** (**'8'**, **'The Passionate Programmer'**, **'1999-09-21'**, **'education'**, **'5'**);

**INSERT INTO** `books` **VALUES** (**'9'**, **'The Lost Symbol'**, **null**, **'crime'**, **'4'**);

**INSERT INTO** `author\_book` **VALUES** (**'1'**, **'1'**, **'1'**);

**INSERT INTO** `author\_book` **VALUES** (**'2'**, **'2'**, **'1'**);

**INSERT INTO** `author\_book` **VALUES** (**'3'**, **'3'**, **'2'**);

**INSERT INTO** `author\_book` **VALUES** (**'4'**, **'4'**, **'2'**);

**INSERT INTO** `author\_book` **VALUES** (**'5'**, **'5'**, **'2'**);

**INSERT INTO** `author\_book` **VALUES** (**'6'**, **'6'**, **'3'**);

**INSERT INTO** `author\_book` **VALUES** (**'7'**, **'9'**, **'6'**);

**INSERT INTO** `author\_book` **VALUES** (**'8'**, **'8'**, **'4'**);

**INSERT INTO** `author\_book` **VALUES** (**'9'**, **'7'**, **'5'**);

Tasks (**create the REST endpoint for given tasks**):

* Create basic CRUD (create/read/update/delete) for all tables
* Show authors which are older 55 years old and sort them by `born` column
* Return books whose author has more than 1 written book
* Find out author which has most books
* Calculate number of books by genre