Exercises — Bookshelf - 2

IT IS MY JOB TO MAKE SURE YOU DO YOURS.

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1.1 Goal

This exercise is a continuation of `bookshelf - 1`.

1.1.1 Exercises

Below is the list of exercises you must submit. If the type of ordering is not specified, then it must be ascending.

`req09.sql`:

List countries and authors, ordered by country, then by author.

Example:

```
 country |        name
---------+--------------------
 America | Edgar Allan Poe
 America | George RR Martin
 Canada  | Anne Robillard
 England | Agatha Christie
```

```
 England | Arthur Conan Doyle
 England | JK Rowling
 England | JRR Tolkien
 France  | Paul Verlaine
 France  | Victor Hugo
 NoWhere | JM Plagiat
(10 rows)
```

req10.sql:

List poems written by french authors, ordered by title, then by author.

Example:

```
        title          |    author
-----------------------+---------------
 Romances sans paroles | Paul Verlaine
(1 row)
```

req11.sql:

List authors that are still alive, ordered by name.

Example:

```
       name
-------------------
 Anne Robillard
 George RR Martin
 JK Rowling
 JM Plagiat
(4 rows)
```

req12.sql:

List books that have not been released strictly before the author's death, ordered by title then by author name.

Example:

```
        title          |     name
-----------------------+---------------
 Epicness              | Paul Verlaine
 Romances sans paroles | Paul Verlaine
(2 rows)
```

req13.sql:

List the first book written by each author, ordered by title then by author. If multiple first books have been released at the same time, all of them must be listed.

Example:

```
                 title                |      author
--------------------------------------+--------------------
 A Game of Thrones                    | George RR Martin
 A Game of Thrones                    | JM Plagiat
 And Then There Were None             | Agatha Christie
 A Study in Scarlet                   | Arthur Conan Doyle
 Epicness                             | Paul Verlaine
 Harry Potter and the Chamber of Secret | JK Rowling
 Le Feu dans le ciel                  | Anne Robillard
 Les Miserables                       | Victor Hugo
 The Hobbit                           | JRR Tolkien
 The Raven and other Poems            | Edgar Allan Poe
(10 rows)
```

Be careful!

For this request, we suggest you take a look at the subqueries documentation or to come back after reading the second practical.

req14.sql:

List authors and the number of days:

- they were alive if they are dead,
- they were old at the date '2000-01-01' if they are still alive.

The result should be ordered by name. You should not display authors that were not born before '2000-01-01'. Authors born this exact day should be displayed.

Example:

```
        name         | days
---------------------+-------
 Agatha Christie     | 31164
 Anne Robillard      | 16397
 Arthur Conan Doyle  | 25978
 Edgar Allan Poe     | 14871
 George RR Martin    | 18730
 JK Rowling          | 12572
 JM Plagiat          |  1263
 JRR Tolkien         | 29827
 Paul Verlaine       | 18911
 Victor Hugo         | 30401
(10 rows)
```

req15.sql:

List authors and the number of books from the bookshelf that they have written, ordered by author. You must also display the suffix " book" or " books" in the stocks column, based on the plurality of the number. Do not display authors who do not have any books in the bookshelf.

Example:

```
       name         | stocks
--------------------+---------
 Agatha Christie    | 1 book
 Anne Robillard     | 1 book
 Arthur Conan Doyle | 2 books
 Edgar Allan Poe    | 1 book
 George RR Martin   | 3 books
 JK Rowling         | 1 book
 JM Plagiat         | 1 book
 JRR Tolkien        | 3 books
 Paul Verlaine      | 2 books
 Victor Hugo        | 1 book
(10 rows)
```

req16.sql:

List titles, their authors and release dates, ordered by release date in descending order (latest release first), then by title, then by author's name. Books released in the 20th century **MUST NOT** be displayed.

Example:

```
         title          |       author       |  release
------------------------+--------------------+-----------
 A Dance with Dragons   | George RR Martin   | 2011-07-12
 A Feast for Crows      | George RR Martin   | 2005-10-17
 A Game of Thrones      | JM Plagiat         | 2004-01-01
 Le Feu dans le ciel    | Anne Robillard     | 2003-02-10
 Romances sans paroles  | Paul Verlaine      | 2002-01-01
 A Study in Scarlet     | Arthur Conan Doyle | 1887-01-01
 Les Miserables         | Victor Hugo        | 1862-01-01
 The Raven and other Poems | Edgar Allan Poe | 1845-01-01
(8 rows)
```

req17.sql:

List titles, their authors and release years, ordered by release year in descending order (latest release first), then by title, then by author's name.

Example:

```
              title                  |      author        | release_year
-------------------------------------+--------------------+--------------
 A Dance with Dragons                | George RR Martin   |      2011
 A Feast for Crows                   | George RR Martin   |      2005
 A Game of Thrones                   | JM Plagiat         |      2004
 Le Feu dans le ciel                 | Anne Robillard     |      2003
 Romances sans paroles               | Paul Verlaine      |      2002
 Harry Potter and the Chamber of Secret | JK Rowling      |      1998
 A Game of Thrones                   | George RR Martin   |      1996
 The Fellowship of the Ring          | JRR Tolkien        |      1954
 And Then There Were None            | Agatha Christie    |      1939
 Epicness                            | Paul Verlaine      |      1937
 The Hobbit                          | JRR Tolkien        |      1937
 The Hound of the Baskervilles       | Arthur Conan Doyle |      1902
 A Study in Scarlet                  | Arthur Conan Doyle |      1887
 Les Miserables                      | Victor Hugo        |      1862
 The Raven and other Poems           | Edgar Allan Poe    |      1845
(15 rows)
```

req18.sql:

Create the `add_author` function, which returns whether the insertion was successful.

Prototype:

```sql
CREATE FUNCTION add_author(name VARCHAR(64),
                           birth_date DATE,
                           death_date DATE,
                           country VARCHAR(64))
RETURNS BOOLEAN
```

req19.sql:

Create the `add_book` function, which returns whether the insertion was successful. Do not insert a book released strictly before the author's birth date.

Prototype:

```sql
CREATE FUNCTION add_book(title VARCHAR(64),
                         author VARCHAR(64),
                         genre VARCHAR(64),
                         release_date DATE)
RETURNS BOOLEAN
```

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