1. Получить список книг определённого жанра с их авторами:

SELECT b.book\_id, b.title, STRING\_AGG(a.first\_name || ' ' || a.last\_name, ', ') AS authors

FROM books b

JOIN book\_authors ba ON b.book\_id = ba.book\_id

JOIN authors a ON ba.author\_id = a.author\_id

WHERE b.genre = 'Роман'

GROUP BY b.book\_id, b.title;

1. Найти книги, написанные более чем одним автором

SELECT b.book\_id, b.title, COUNT(ba.author\_id) AS author\_count

FROM books b

JOIN book\_authors ba ON b.book\_id = ba.book\_id

GROUP BY b.book\_id, b.title

HAVING COUNT(ba.author\_id) > 1;

1. Получить список авторов и количество книг, которые они написали

SELECT a.author\_id, a.first\_name || ' ' || a.last\_name AS author\_name, COUNT(ba.book\_id) AS book\_count

FROM authors a

JOIN book\_authors ba ON a.author\_id = ba.author\_id

GROUP BY a.author\_id, a.first\_name, a.last\_name

ORDER BY book\_count DESC;

1. Найти книги, опубликованные в определённом году

SELECT b.book\_id, b.title, STRING\_AGG(a.first\_name || ' ' || a.last\_name, ', ') AS authors

FROM books b

JOIN book\_authors ba ON b.book\_id = ba.book\_id

JOIN authors a ON ba.author\_id = a.author\_id

WHERE EXTRACT(YEAR FROM b.published\_date) = 1869

GROUP BY b.book\_id, b.title;

1. Получить список книг с ценой выше средней

SELECT b.book\_id, b.title, b.price

FROM books b

WHERE b.price > (SELECT AVG(price) FROM books);

1. Найти авторов, у которых есть книги с нулевым количеством на складе

SELECT DISTINCT a.author\_id, a.first\_name || ' ' || a.last\_name AS author\_name

FROM authors a

JOIN book\_authors ba ON a.author\_id = ba.author\_id

JOIN books b ON ba.book\_id = b.book\_id

WHERE b.stock = 0;

1. Получить список книг, отсортированных по дате публикации

SELECT b.book\_id, b.title, b.published\_date, STRING\_AGG(a.first\_name || ' ' || a.last\_name, ', ') AS authors

FROM books b

JOIN book\_authors ba ON b.book\_id = ba.book\_id

JOIN authors a ON ba.author\_id = a.author\_id

GROUP BY b.book\_id, b.title, b.published\_date

ORDER BY b.published\_date ASC;

1. Найти общую стоимость всех книг на складе

SELECT SUM(b.price \* b.stock) AS total\_stock\_value

FROM books b;

1. Получить список книг с указанием количества авторов

SELECT b.book\_id, b.title, COUNT(ba.author\_id) AS author\_count

FROM books b

JOIN book\_authors ba ON b.book\_id = ba.book\_id

GROUP BY b.book\_id, b.title;

1. Найти книги, которые были опубликованы в XX веке

SELECT b.book\_id, b.title, b.published\_date

FROM books b

WHERE b.published\_date BETWEEN '1901-01-01' AND '2000-12-31';

1. Получить список авторов, чьи книги имеют наибольшее количество экземпляров на складе

SELECT a.author\_id, a.first\_name || ' ' || a.last\_name AS author\_name, SUM(b.stock) AS total\_stock

FROM authors a

JOIN book\_authors ba ON a.author\_id = ba.author\_id

JOIN books b ON ba.book\_id = b.book\_id

GROUP BY a.author\_id, a.first\_name, a.last\_name

ORDER BY total\_stock DESC

LIMIT 5;

1. Запрос для получения списка книг с их авторами

SELECT b.book\_id, b.title, STRING\_AGG(a.first\_name || ' ' || a.last\_name, ', ') AS authors, b.genre, b.published\_date, b.price, b.stock

FROM books b

JOIN book\_authors ba ON b.book\_id = ba.book\_id

JOIN authors a ON ba.author\_id = a.author\_id

GROUP BY b.book\_id, b.title, b.genre, b.published\_date, b.price, b.stock

1. Получить список жанров с количеством книг в каждом

SELECT b.genre, COUNT(\*) AS book\_count

FROM books b

GROUP BY b.genre

ORDER BY book\_count DESC;

1. Получить список авторов, чьи книги есть на складе

SELECT DISTINCT a.author\_id, a.first\_name || ' ' || a.last\_name AS author\_name

FROM authors a

JOIN book\_authors ba ON a.author\_id = ba.author\_id

JOIN books b ON ba.book\_id = b.book\_id

WHERE b.stock > 0;

1. Найти авторов, у которых есть книги дороже средней цены

SELECT DISTINCT a.author\_id, a.first\_name || ' ' || a.last\_name AS author\_name

FROM authors a

JOIN book\_authors ba ON a.author\_id = ba.author\_id

JOIN books b ON ba.book\_id = b.book\_id

WHERE b.price > (SELECT AVG(price) FROM books);