

# Online Bookstore SQL Project Queries

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## Books & Inventory

- Retrieve all books in the 'Fiction' genre

```
SELECT * FROM books WHERE genre = 'Fiction';
```

- Books published after the year 1950 (sorted)

```
SELECT * FROM books WHERE published_year > 1950 ORDER BY  
published_year;
```

- Retrieving the total stock of books available

```
SELECT SUM(stock) AS total_available_stock FROM books;
```

- Details of the most expensive book

```
SELECT * FROM books ORDER BY price DESC LIMIT 1;
```

- Find the book with the lowest stock

```
SELECT * FROM books ORDER BY stock;
```

- Average price of books in the 'Fantasy' genre

```
SELECT Genre, CAST(AVG(Price) AS DECIMAL(10,2)) AS avg_price FROM books  
WHERE Genre = 'Fantasy' GROUP BY Genre;
```

- Top 3 expensive books in the 'Fantasy' genre

```
SELECT Title, Genre, Price FROM books WHERE Genre = 'Fantasy' ORDER BY  
Price DESC LIMIT 3;
```

- Calculate the stock remaining after fulfilling all orders

```
SELECT b.Book_ID, b.Title, b.Stock, COALESCE(SUM(o.Quantity), 0) AS  
order_quantity, b.Stock - COALESCE(SUM(o.Quantity), 0) AS  
remaining_quantity FROM books b LEFT JOIN orders o ON o.Book_ID =  
b.Book_ID GROUP BY b.Book_ID, b.Title, b.Stock ORDER BY b.Book_ID;
```

## Customers & Orders

- List all customers from Canada

```
SELECT * FROM customers WHERE Country = 'Canada';
```

- Customers who ordered more than 1 quantity of a book

```
SELECT * FROM orders WHERE quantity > 1;
```

- Customers who have placed at least 2 orders

```
SELECT c.Name, COUNT(o.Order_ID) AS order_count FROM customers c JOIN
orders o ON o.Customer_ID = c.Customer_ID GROUP BY c.Name HAVING
COUNT(o.Order_ID) >= 2;
```

- Cities where customers spent over \$30

```
SELECT c.City, SUM(o.Total_Amount) AS total_spent FROM customers c JOIN
orders o ON o.Customer_ID = c.Customer_ID GROUP BY c.City HAVING
SUM(o.Total_Amount) > 30 ORDER BY total_spent;
```

- Customers who spent the most on orders (Top 10)

```
SELECT c.Customer_ID, c.Name, SUM(o.Total_Amount) AS total_spent FROM
customers c JOIN orders o ON o.Customer_ID = c.Customer_ID GROUP BY
c.Customer_ID, c.Name ORDER BY total_spent DESC LIMIT 10;
```

## Revenue & Sales

- Orders placed in November 2023

```
SELECT * FROM orders WHERE Order_date BETWEEN '2023-11-01' AND '2023-
11-30' ORDER BY Order_date;
```

- Retrieve all orders where total amount exceeds \$20

```
SELECT * FROM orders WHERE total_amount > 20;
```

- List all genres available

```
SELECT DISTINCT Genre FROM books;
```

- Total revenue generated from all orders

```
SELECT SUM(Total_amount) AS total_revenue FROM orders;
```

- Retrieve the total number of books sold for each genre

```
SELECT b.Genre, SUM(o.Quantity) AS total_per_genre FROM books b JOIN
orders o ON o.Book_ID = b.Book_ID GROUP BY b.Genre;
```

- Most frequently ordered book

```
SELECT o.Book_ID, b.Title, COUNT(o.Order_ID) AS ordered_count FROM
orders o JOIN books b ON b.Book_ID = o.Book_ID GROUP BY o.Book_ID,
b.Title ORDER BY ordered_count DESC LIMIT 1;
```

- Total quantity of books sold by each author

```
SELECT b.Author, SUM(o.Quantity) AS total_books_sold FROM books b JOIN
orders o ON o.Book_ID = b.Book_ID GROUP BY b.Author;
```

## Insights Summary

- Several customers placed multiple orders, showing repeat engagement.
- Customers from Canada contribute significantly to sales activity.
- High-spending customers are concentrated in certain cities.
- Fantasy books are among the most expensive and popular.
- Some books have low remaining stock while others are overstocked.
- Promotions in high-spending cities and inventory optimization could boost revenue.