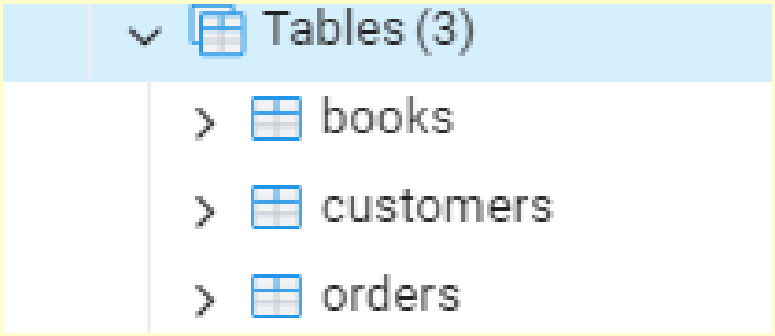
SQL BOOK DATA



SQL Project Analysis

In this SQL project, we analyze data from three key tables: Customer, Order, and Book.

1. Customer Table: Stores customer details such as customer ID, name, contact information, and address.
2. Order Table: Contains order-related data, including order ID, customer ID (foreign key), order date, and total amount.
3. Book Table: Holds book-related information, including book ID, title, author, genre, price, and stock availability.

Analysis Goals

- Identify customer purchase patterns and most frequent buyers.
- Analyze order trends over time to track sales performance.
- Determine the best-selling books and revenue contribution by genre.
- Optimize inventory management by evaluating stock levels and demand.

Retrieve all books in the "Fiction" genre

```
SELECT
    genre FROM Books

        WHERE Genre='Fiction'
```

	genre character varying (50)
1	Fiction
2	Fiction
3	Fiction
4	Fiction
5	Fiction

Find books published after the year 1950

```
SELECT published_year
 FROM
      Books
 WHERE Published_year>1950;
```

	published_year integer
1	1971
2	2020
3	1956
4	1985
5	2019




Retrieve the total stock of books available

```
SELECT
      SUM(stock) AS Total_Stock
            From Books;
```

	total_stock bigint
1	25056

List all genres available in the Books table

```
SELECT DISTINCT
        genre FROM Books;
```

	genre character varying (50)
1	Romance
2	Biography
3	Mystery
4	Fantasy
5	Fiction




Find the book with the lowest stock

```
SELECT * FROM Books
      ORDER BY stock
            LIMIT 1;
```

	book_id [PK] integer	title character varying (100)	author character varying (100)	genre character varying (50)	published_year integer	price numeric (10,2)	stock integer
1	44	Networked systemic implementation	Ryan Frank	Science Fiction	1965	13.55	0

Calculate the total revenue generated from all orders

```
SELECT SUM(total_amount)
        As Revenue
            FROM Orders;
```

	revenue numeric
1	75628.66

Retrieve the total number of books sold for each genre

```
SELECT b.Genre, SUM(o.Quantity)
                AS Total_Books_sold
               FROM Orders o
  JOIN Books b ON o.book_id = b.book_id
               GROUP BY b.Genre;
```

	genre character varying (50)	total_books_sold bigint
1	Romance	439
2	Biography	285
3	Mystery	504
4	Fantasy	446
5	Fiction	225
6	Non-Fiction	351
7	Science Fiction	447

Retrieve the total quantity of books sold by each author

```
SELECT b.author, SUM(o.quantity)
                    AS Total_Books_Sold
                    FROM orders o
JOIN books b ON o.book_id=b.book_id
                    GROUP BY b.Author;
```

	author character varying (100)	total_books_sold bigint
1	Jared Cortez	10
2	Tracy Parker	11
3	Taylor Wang	9
4	Cathy Knight	6
5	Bianca Matthews	3
6	Douglas Malone	6
7	James Alvarado	9
8	Betty Cross	6




Find the customer who spent the most on orders

```
SELECT c.customer_id, c.name,
        SUM(o.total_amount) AS Total_Spent
                FROM orders o
JOIN customers c ON o.customer_id=c.customer_id
              GROUP BY c.customer_id, c.name
              ORDER BY Total_spent Desc LIMIT 1;
```

	customer_id [PK] integer	name character varying (100)	total_spent numeric
1	457	Kim Turner	1398.90

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