**BASIC**

**Retrieve all books in the "Fiction" genre**

**select \* from books**

**where Genre = "Fiction";**

**Find books published after the year 1950**

**select \* from books**

**where Published\_Year > 1950;**

**List all customers from Canada**

**select \*from customers**

**where Country = "Canada";**

**Show orders placed in November 2023**

**select\* from orders**

**where order\_date between '2023-11-01' and '2023-11-30';**

**Retrieve the total stock of books available**

**select SUM(stock) as total\_stock From books;**

**Find the details of the most expensive book**

**select \* from books**

**order by price desc**

**limit 1;**

**Show all customers who ordered more than 1 quantity of a book**

**select Customer\_ID from orders**

**where quantity > 1**

**Retrieve all orders where the total amount exceeds $20**

**select \* from orders**

**where Total\_Amount > '$20'**

**List all genres available in the Books table**

**select distinct genre from books**

**Find the book with the lowest stock**

**Select \* from books**

**Order by stock ASC**

**Limit 1;**

**Calculate the total revenue generated from all orders**

**select SUM(total\_amount) as Total\_revenue from orders**

**Advanced**

**Retrieve the total number of books sold for each genre**

**select books.genre, sum(orders.quantity) AS total\_Books\_Sold**

**From orders**

**Join Books on orders.Book\_ID = books.Book\_ID**

**group by books.Genre**

**Find the average price of books in the "Fantasy" genre**

**select avg(price) AS average\_price from books**

**where genre ="Fantasy"**

**List customers who have placed at least 2 orders**

**select customers.Customer\_ID , customers.Name , count(orders.order\_id) As total\_orders**

**from customers**

**join orders on customers.Customer\_ID = orders.Customer\_ID**

**group by customers.Customer\_ID, customers.name**

**having count(orders.order\_id)>=2;**

**Find the most frequently ordered book**

**select orders.Book\_ID , books.title,count(orders.Order\_ID) as frequently\_ordered**

**from orders**

**join books on orders.book\_id = books.book\_id**

**group by orders.Book\_ID , books.title order by frequently\_ordered desc limit 1;**

**Show the top 3 most expensive books of the "Fantasy" genre**

**select \* from books**

**where genre ="Fantasy" order by price desc**

**limit 3;**

**Retrieve the total quantity of books sold by each author**

**select books.Author, sum(orders.quantity) as total\_quantity**

**from orders**

**join books on orders.book\_id= books.Book\_ID**

**group by books.Author;**

**List the cities where customers who spent over $30 are located**

**SELECT customers.city**

**FROM Customers**

**JOIN Orders ON customers.customer\_id = orders.customer\_id**

**GROUP BY customers.customer\_id, customers.city**

**HAVING SUM(orders.total\_amount) > 30;**

**Find the customer who spent the most on orders**

**select customers.customer\_id, customers.name, round(sum(orders.total\_amount),2) as total\_spent**

**from customers**

**join orders on customers.Customer\_ID =orders.Customer\_ID**

**group by customers.Customer\_ID, customers.name**

**order by total\_spent desc limit 1;**

**Calculate the stock remaining after fulfilling all orders**

**select books.Book\_ID, books.Title, books.stock,coalesce(sum(orders.quantity),0) as order\_quantity, books.stock-coalesce(sum(orders.quantity),0) as remaining\_quantity**

**from books**

**left join orders ON books.Book\_ID= orders.Book\_ID**

**group by books.Book\_ID, books.Title, books.stock order by books.book\_id;**