Bookstore Sales and Customer Analysis Report.

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1) Retrieve all books in the "Fiction" genre

Answer:

Select * from Books where genre='Fiction';

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2) Find books published after the year 1950

Answer:

Select * from Books where Published_Year>1950 order by Published_Year ASC;

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3) List all customers from Canada

Answer:

Select * from Customers where Country='Canada' order by Customer_ID ASC;

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4) Show orders placed in November 2023

Answer:

Select * from orders where Order_Date BETWEEN '2023-11-01' AND '2023-11-30' order by Order_Date ASC;

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5) Retrieve the total stock of books available

Answer:

Select * from books where stock>0 order by Stock asc;

Select sum(stock) as total_stock from books;

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6) Find the details of the most expensive book

Answer:

Select * from books order by price desc;

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

Answer:

Select * from orders where quantity>1 order by quantity ASC;

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8) Retrieve all orders where the total amount exceeds $20

Answer:

Select * from orders where total_amount>20 order by total_amount ASC;

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9) List all genres available in the Books table

Answer:

Select count(Distinct genre) as total_genres from books;

Select distinct genre from books;

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10) Find the book with the lowest stock

Answer:

Select * from books order by stock Asc;

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11) Calculate the total revenue generated from all orders

Answer:

Select sum(total_amount) as total_revenue from orders;

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12) Retrieve the total number of books sold for each genre

Answer:

Select b.genre,sum(o.quantity)

from orders o

join books b on o.book_id=b.book_id

group by b.genre;

-- to check the stock of each books

Select genre, sum(stock) from books group by genre order by sum(stock) desc;

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13) Find the average price of books in the "Fantasy" genre

Answer:

Select avg(price) as average_price from books where genre='Fantasy';

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14) List customers who have placed at least 2 orders

Answer:

Select C.name,O.quantity

from orders o

```
join customers C on c.customer_id=o.customer_id
where o.quantity>=2 order by o.quantity Asc;
--Use of having
Select customer_id, count(order_id) as total_orders
from orders
group by customer_id
having count(order_id)>=2 order by customer_id ASC;
-- we want to see the name of customer as well
Select c.customer_id,c.name, count(o.order_id) as total_orders
from orders o
join customers c on c.customer_id=o.customer_id
group by c.customer_id,c.name
having count(o.order_id)>=2 order by c.customer_id ASC;
```

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15) Find the most frequently ordered book

Answer:

```
Select b.title,count(o.order_id)
from books b
join orders o on b.book_id=o.book_id
group by b.title
order by count(o.order_id) desc ;
```

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16) Show the top 3 most expensive books of the 'Fantasy' genre

Answer:

```
Select title,price as  expensice_books from books where genre='Fantasy' order by price
desc limit 3;
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17) Retrieve the total quantity of books sold by each author

Answer:

```
Select b.author,sum(o.quantity)
from orders o
join books b on b.book_id=o.book_id
group by b.author;
```

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

Answer:

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Select distinct(c.city),o.total_amount
from customers c
join orders o on c.customer_id=o.customer_id
where o.total_amount>30 order by o.total_amount Asc;
```

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19) Find the customer who spent the most on orders

Answer:

```
Select c.name, sum(o.total_amount)
from orders o
join customers c on c.customer_id=o.customer_id
group by c.name
order by sum(o.total_amount) desc limit 5;
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20) Calculate the stock remaining after fulfilling all orders

Answer:

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Select b.title,b.stock,coalesce(sum(o.quantity),0) as order_quantity, b.stock-
coalesce(sum(o.quantity),0) as remaing
from books b
left join orders o on b.book_id=o.book_id
Group by b.title,b.stock;
```