ONLINE BOOK STORE DATA ANALYSIS

Answers to the Business Questions.

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1) Retrieve all books in the "Fiction" genre:

```
select Book_ID,Title from Books where Genre='Fiction'
```

2) Find books published after the year 1950:

```
select Book_ID,Title,Published_Year from Books where Published_Year
> 1950
```

3) List all customers from the Canada:

```
select Customer_ID,Name from Customers where Country='Canada'
```

4) Show orders placed in November 2023:

```
select * from Orders where MONTH(Order_Date)=11 and
Year(Order_Date)=2023
```

5) Retrieve the total stock of books available:

```
select Sum(Stock) [Total Stock] from Books
```

6) Find the details of the most expensive book:

```
select * from Books where Price=(Select MAX(Price) from Books)
```

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

```
select Customer_ID from Orders where Quantity>1
```

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

```
select * from Orders where Total_Amount>20
```

9) List all genres available in the Books table:

```
select Distinct Genre from Books
```

10) Find the book with the lowest stock:

```
select * from Books where Stock=(select MIN(Stock) from Books)
```

11) Calculate the total revenue generated from all orders:

```
select SUM(Total_Amount) [Total Revenue] from Orders    --75628.66
```

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

```
select Genre,SUM(Quantity) [Quantity sold for each genre]
from Books b JOIN Orders o on b.Book_ID=o.Book_ID
Group by Genre
```

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

```
select AVG(Price) [Avg price for fantasy genre] from Books where
Genre='Fantasy'  --25.98
```

14) List customers who have placed at least 2 orders:

```
select Name,COUNT(Order_ID) [No. of orders]
from Customers c Join Orders o on c.Customer_ID=o.Customer_ID
group by Name
having COUNT(Order_ID)>=2
```

15) Find the most frequently ordered book:

```
select top 1 b.Book_ID,Title,Count(Order_ID) [Frequency]
from Books b join Orders o on b.Book_ID=o.Book_ID
Group by b.Book_ID,Title
order by count(Order_ID) desc
```

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

```
select top 3 Book_ID,Title,Price from Books
order by Price desc
```

17) Retrieve the total quantity of books sold by each author:

```
select Author,SUM(Quantity) [Books sold by each author]
from Books b join Orders o on b.Book_ID=o.Book_ID
group by Author
order by SUM(Quantity) desc
```

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

```
select distinct c.city, total_amount
from orders o
join customers c on o.customer_id=c.customer_id
where o.total_amount > 30
```

19) Find the customer who spent the most on orders:

```
select top 1 c.customer_id, c.name, SUM(o.total_amount)  [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
```

20) 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 b.book_id=o.book_id
group by b.book_id ,b.Title,b.Stock order by b.book_id.
```