**SQL Project on Online-book-store**

**Assignment Queries**

**BASIC QUERIES**

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

**Answer**

select \* from Books

where Genre='Fiction';

1. **Find books published after the year 1950**

**Answer**

select \* from Books

where published\_year>1950;

1. **List all customers from the Canada**

**Answer**

select \* from Customers

where country= 'Canada';

1. **Show orders placed in November 2023**

**Answer**

select \* from Orders

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

1. **Retrieve the total stock of books available**

**Answer**

select sum(stock) as Total\_stock

from Books;

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

**Answer**

select \* from Books

order by price desc

limit 1;

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

**Answer**

select \* from Orders

where quantity>1;

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

**Answer**

select \* from Orders

where total\_amount>20;

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

**Answer**

select distinct genre from Books;

1. **Find the book with the lowest stock**

**Answer**

select \* from Books

order by stock

limit 1;

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

**Answer**

select sum(total\_amount) as revenue

from Orders;

**ADVANCED QUERIES**

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

**Answer**

select \* from Orders;

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;

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

**Answer**

select avg(price) as avg\_price

from Books

where genre='Fantasy';

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

**Answer**

select o.customer\_id, c.name, count(o.order\_id) as order\_count

from Orders o

join Customers c on o.customer\_id= c.customer\_id

group by o.customer\_id, c.name

having count(order\_id) >=2;

1. **Find the most frequently ordered book**

**Answer**

select o.book\_id, b.title, count(o.order\_id) as order\_count

from Orders o

join books b on o.book\_id=b.book\_id

group by o.book\_id, b.title

order by order\_count desc

limit 1;

1. **Show the top 3 most expensive books of 'Fantasy' Genre**

**Answer**

select \* from Books

where genre='Fantasy'

order by price desc

limit 3;

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

**Answer**

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;

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

**Answer**

select distinct c.city, total\_amount

from orders o

join customers c on o.customer\_id=c.customer\_id

where o.total\_amount>30;

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

**Answer**

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;

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

**Answer**

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 order by b.book\_id;