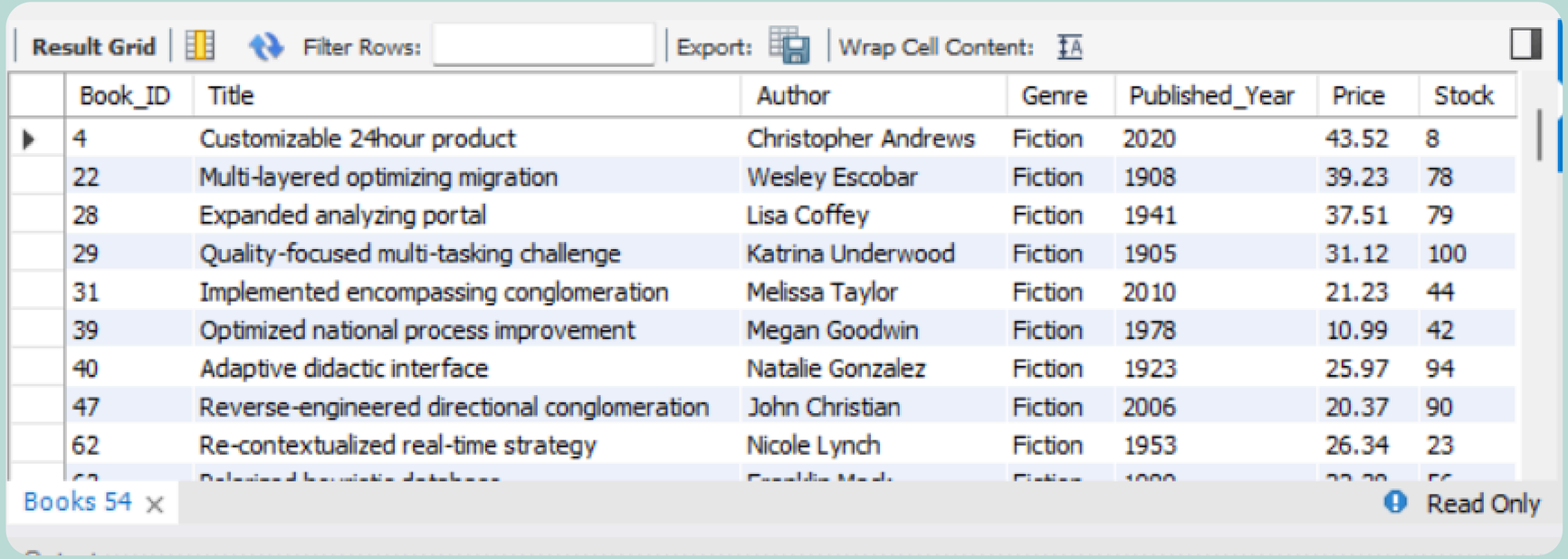
SQL PROJECT ON ONLINE BOOK STORE SALES

HELLO

My Name is SADIQUA QUADIR and in this project, I have utilised SQL Queries to solve questions related to online book sales.

Retrieve all books in the "Fiction" genre.

```
SELECT * FROM Books
WHERE Genre="Fiction";
```



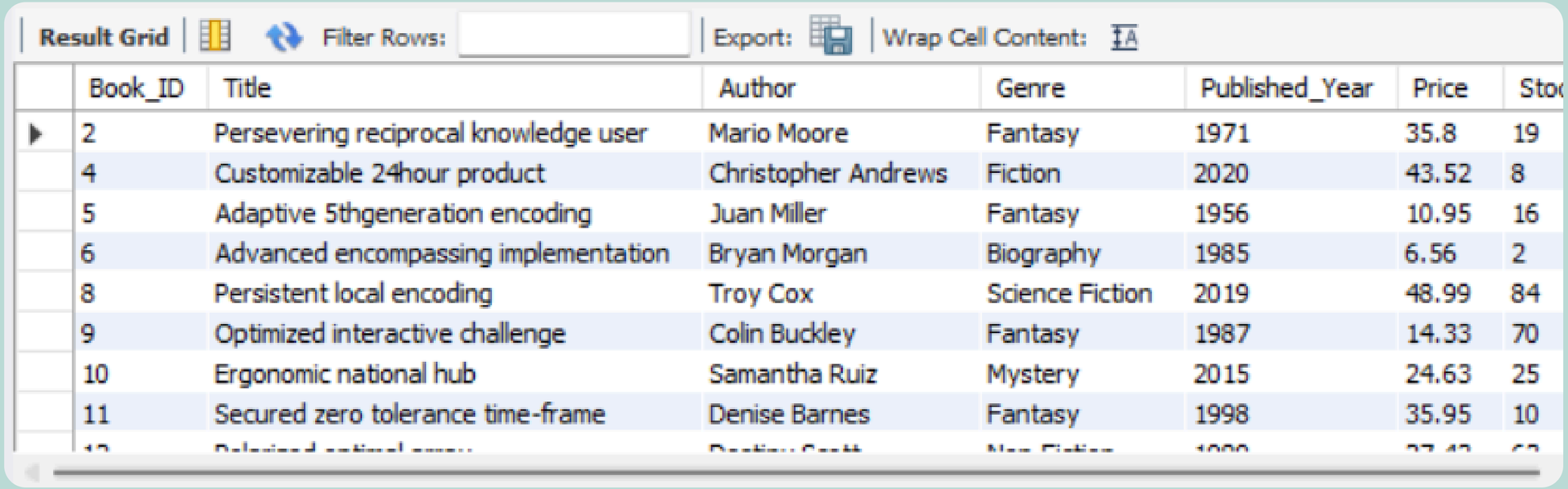
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Book_ID	Title	Author	Genre	Published_Year	Price	Stock
4	Customizable 24hour product	Christopher Andrews	Fiction	2020	43.52	8
22	Multi-layered optimizing migration	Wesley Escobar	Fiction	1908	39.23	78
28	Expanded analyzing portal	Lisa Coffey	Fiction	1941	37.51	79
29	Quality-focused multi-tasking challenge	Katrina Underwood	Fiction	1905	31.12	100
31	Implemented encompassing conglomeration	Melissa Taylor	Fiction	2010	21.23	44
39	Optimized national process improvement	Megan Goodwin	Fiction	1978	10.99	42
40	Adaptive didactic interface	Natalie Gonzalez	Fiction	1923	25.97	94
47	Reverse-engineered directional conglomeration	John Christian	Fiction	2006	20.37	90
62	Re-contextualized real-time strategy	Nicole Lynch	Fiction	1953	26.34	23

Books 54 | Read Only

Find books published after the year 1950.

SELECT * FROM Books
WHERE Published_Year>1950;

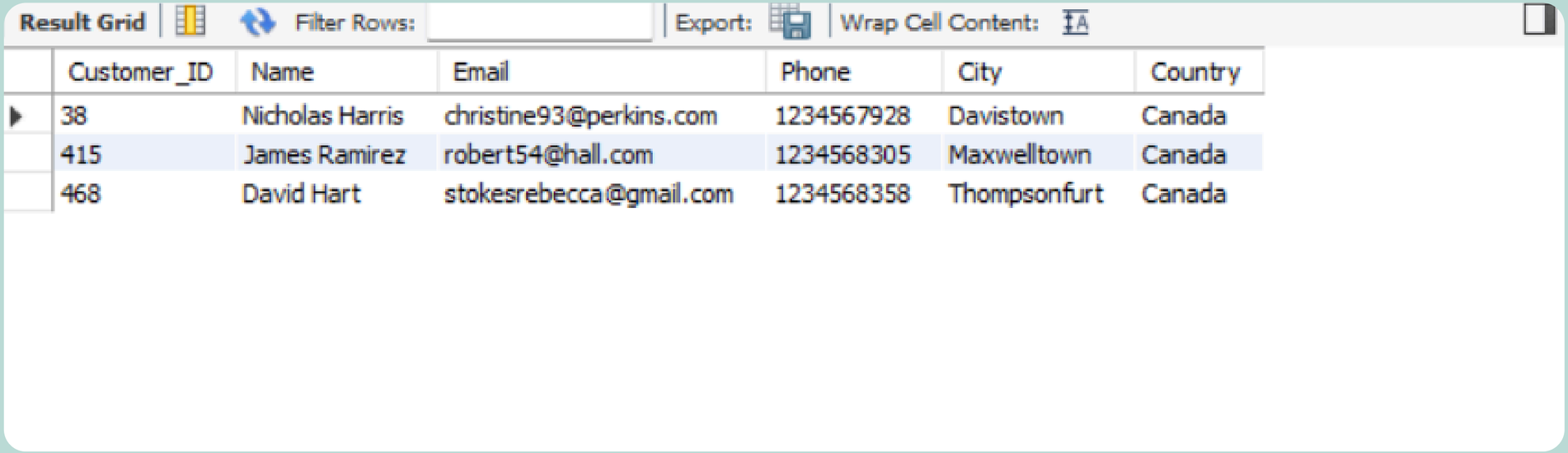


Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Book_ID	Title	Author	Genre	Published_Year	Price	Stoc
2	Persevering reciprocal knowledge user	Mario Moore	Fantasy	1971	35.8	19
4	Customizable 24hour product	Christopher Andrews	Fiction	2020	43.52	8
5	Adaptive 5thgeneration encoding	Juan Miller	Fantasy	1956	10.95	16
6	Advanced encompassing implementation	Bryan Morgan	Biography	1985	6.56	2
8	Persistent local encoding	Troy Cox	Science Fiction	2019	48.99	84
9	Optimized interactive challenge	Colin Buckley	Fantasy	1987	14.33	70
10	Ergonomic national hub	Samantha Ruiz	Mystery	2015	24.63	25
11	Secured zero tolerance time-frame	Denise Barnes	Fantasy	1998	35.95	10

List all customers from Canada.

```
SELECT * FROM Customers
WHERE Country = "Canada";
```

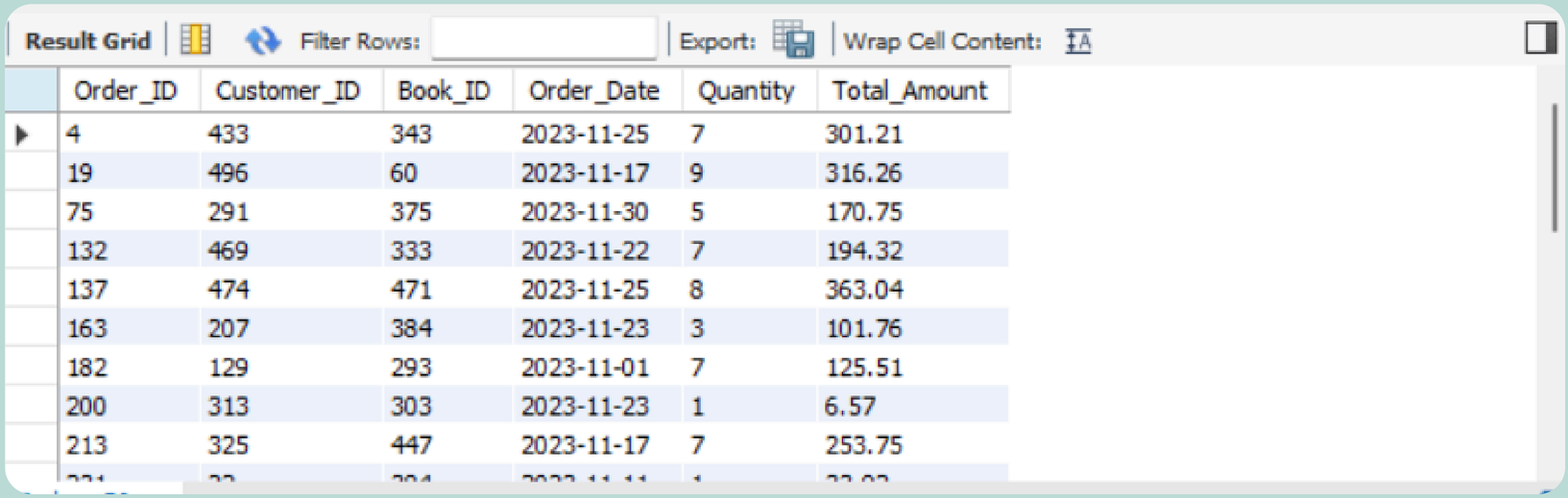


Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Customer_ID	Name	Email	Phone	City	Country
38	Nicholas Harris	christine93@perkins.com	1234567928	Davistown	Canada
415	James Ramirez	robert54@hall.com	1234568305	Maxwelltown	Canada
468	David Hart	stokesrebecca@gmail.com	1234568358	Thompsonfurt	Canada

Show orders placed in November 2023.

```
SELECT * FROM Orders
WHERE Order_Date BETWEEN '2023-11-01' AND '2023-11-30';
```

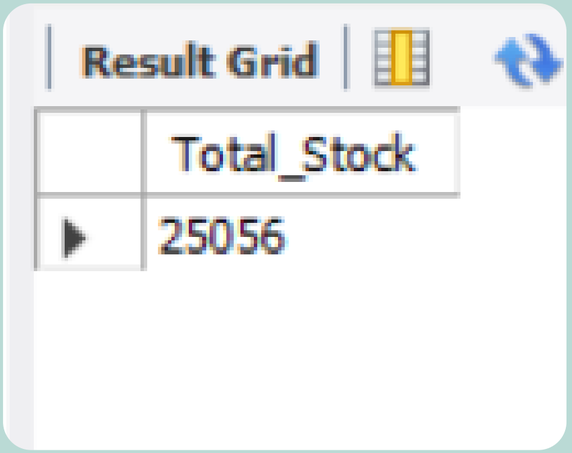


Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Order_ID	Customer_ID	Book_ID	Order_Date	Quantity	Total_Amount
4	433	343	2023-11-25	7	301.21
19	496	60	2023-11-17	9	316.26
75	291	375	2023-11-30	5	170.75
132	469	333	2023-11-22	7	194.32
137	474	471	2023-11-25	8	363.04
163	207	384	2023-11-23	3	101.76
182	129	293	2023-11-01	7	125.51
200	313	303	2023-11-23	1	6.57
213	325	447	2023-11-17	7	253.75

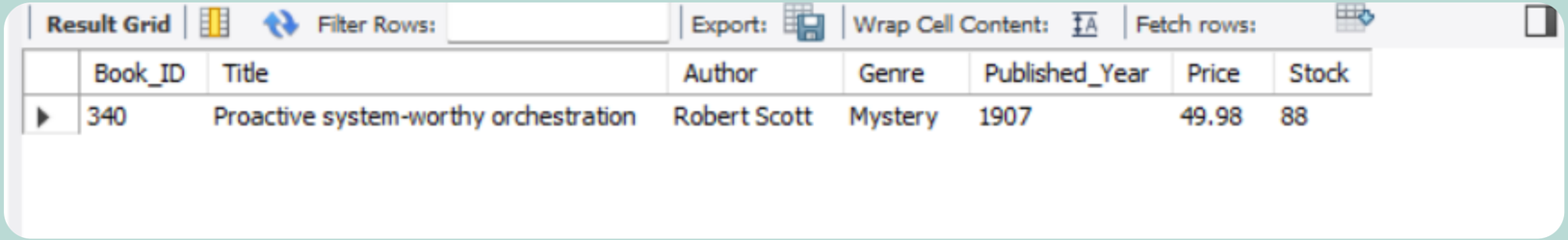
Retrieve the total stock of books available.

```
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;
```

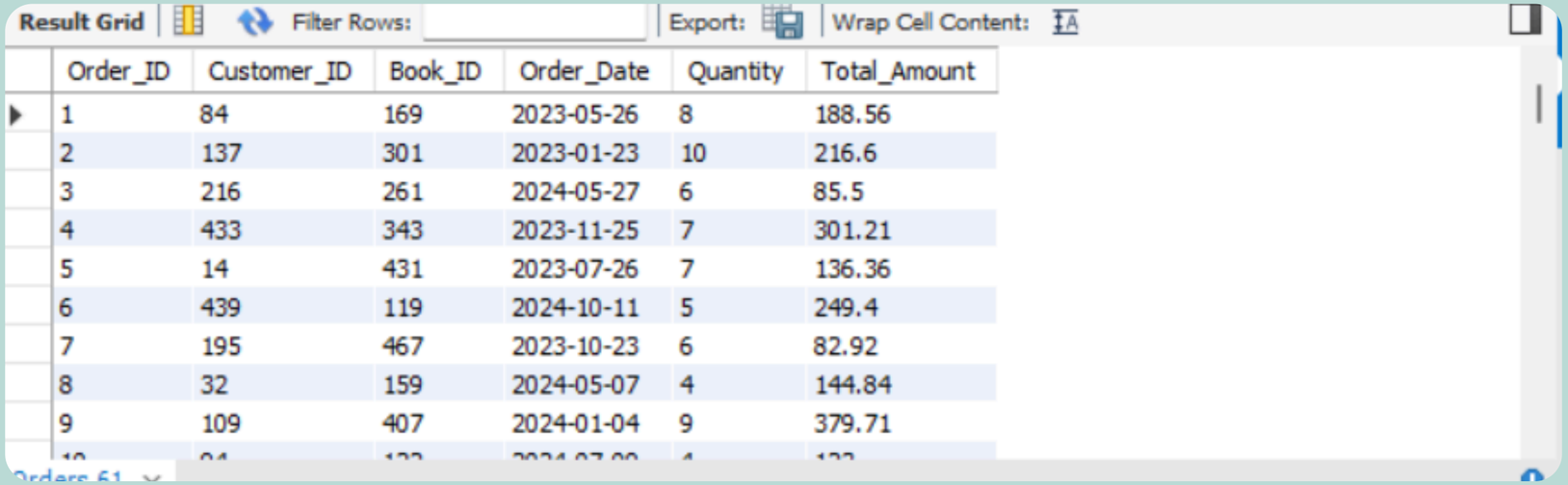


Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

Book_ID	Title	Author	Genre	Published_Year	Price	Stock
340	Proactive system-worthy orchestration	Robert Scott	Mystery	1907	49.98	88

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

```
SELECT * FROM Orders
WHERE Quantity>1;
```

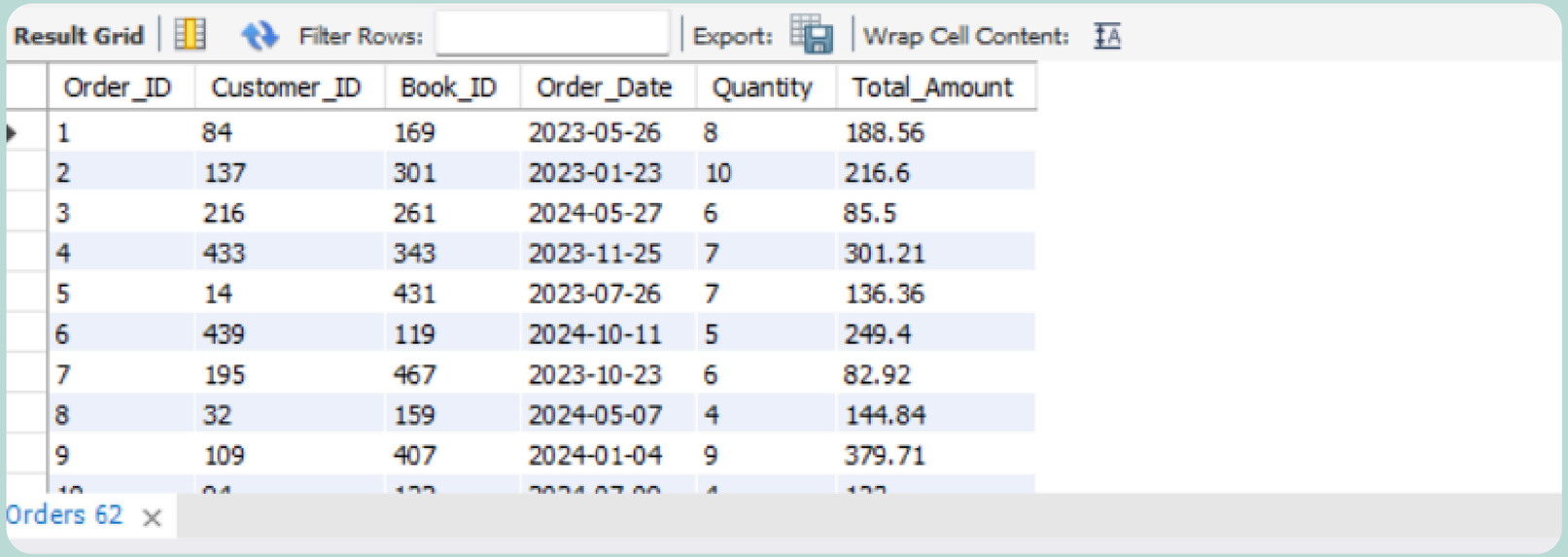


Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Order_ID	Customer_ID	Book_ID	Order_Date	Quantity	Total_Amount
1	84	169	2023-05-26	8	188.56
2	137	301	2023-01-23	10	216.6
3	216	261	2024-05-27	6	85.5
4	433	343	2023-11-25	7	301.21
5	14	431	2023-07-26	7	136.36
6	439	119	2024-10-11	5	249.4
7	195	467	2023-10-23	6	82.92
8	32	159	2024-05-07	4	144.84
9	109	407	2024-01-04	9	379.71

Retrieve all orders where the total amount exceeds $20.

```
SELECT * FROM Orders
WHERE Total_Amount>20;
```



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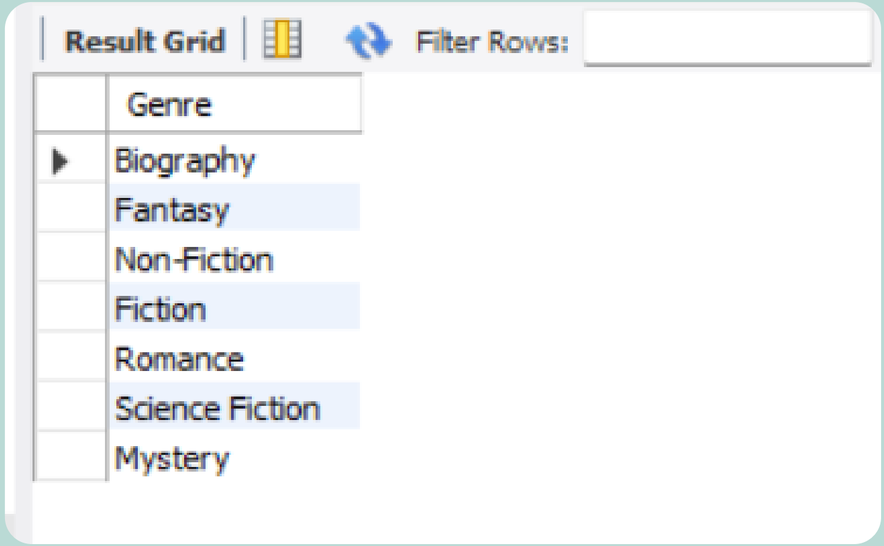
8	32	159	2024-05-07	4	144.84
9	109	407	2024-01-04	9	379.71

Orders 62

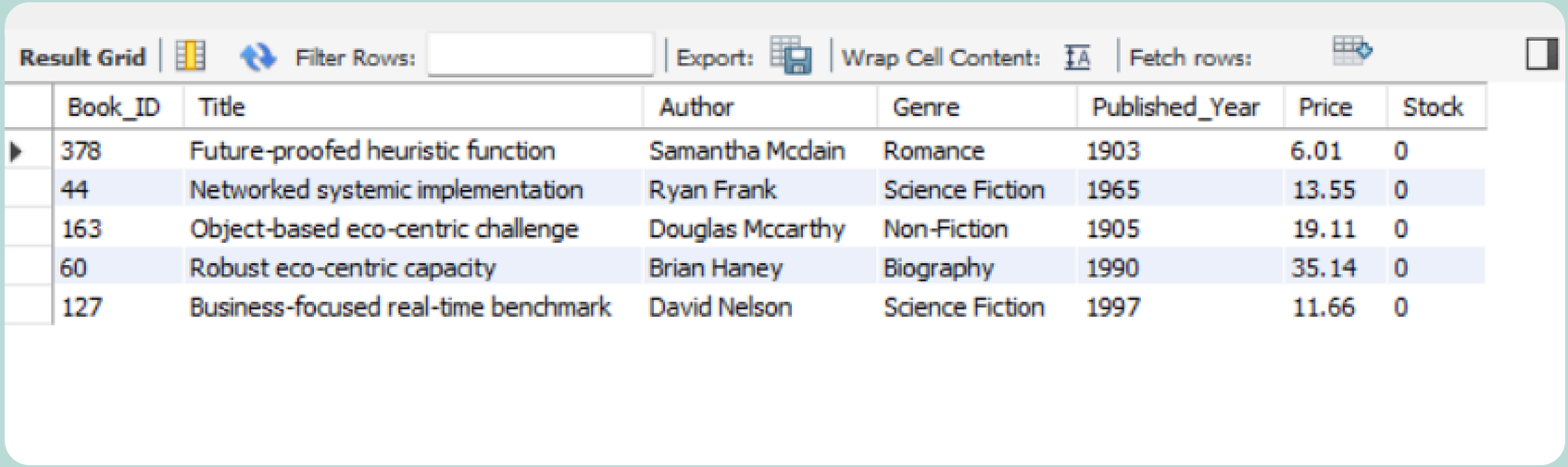
List all the genres available in the Books table.

```
SELECT DISTINCT Genre
FROM Books;
```



Find the book with the lowest stock.

```
SELECT * FROM Books
ORDER BY Stock ASC LIMIT 5;
```

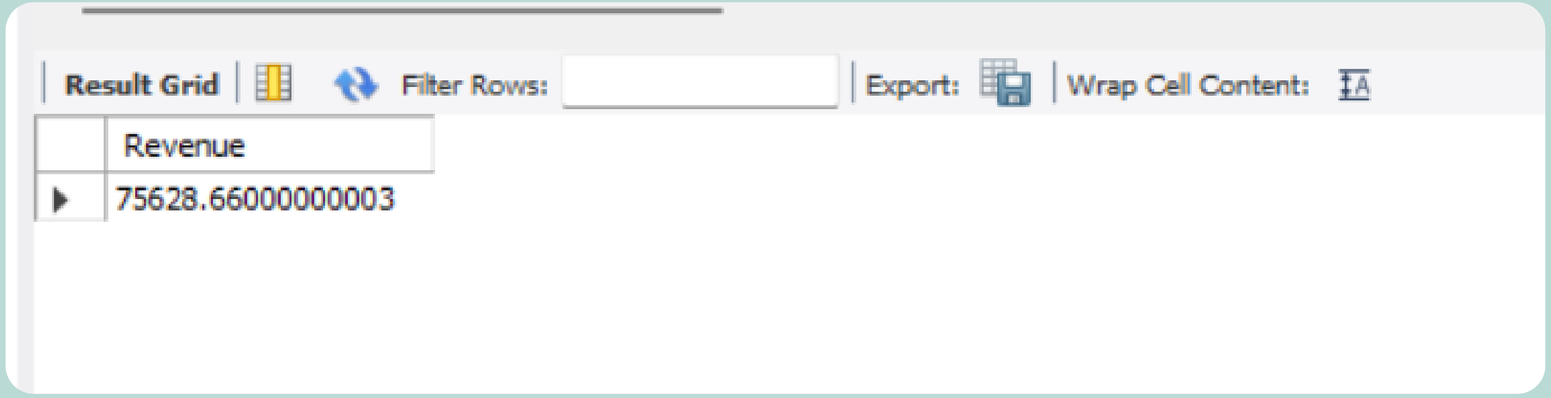


Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

Book_ID	Title	Author	Genre	Published_Year	Price	Stock
378	Future-proofed heuristic function	Samantha Mcclain	Romance	1903	6.01	0
44	Networked systemic implementation	Ryan Frank	Science Fiction	1965	13.55	0
163	Object-based eco-centric challenge	Douglas Mccarthy	Non-Fiction	1905	19.11	0
60	Robust eco-centric capacity	Brian Haney	Biography	1990	35.14	0
127	Business-focused real-time benchmark	David Nelson	Science Fiction	1997	11.66	0

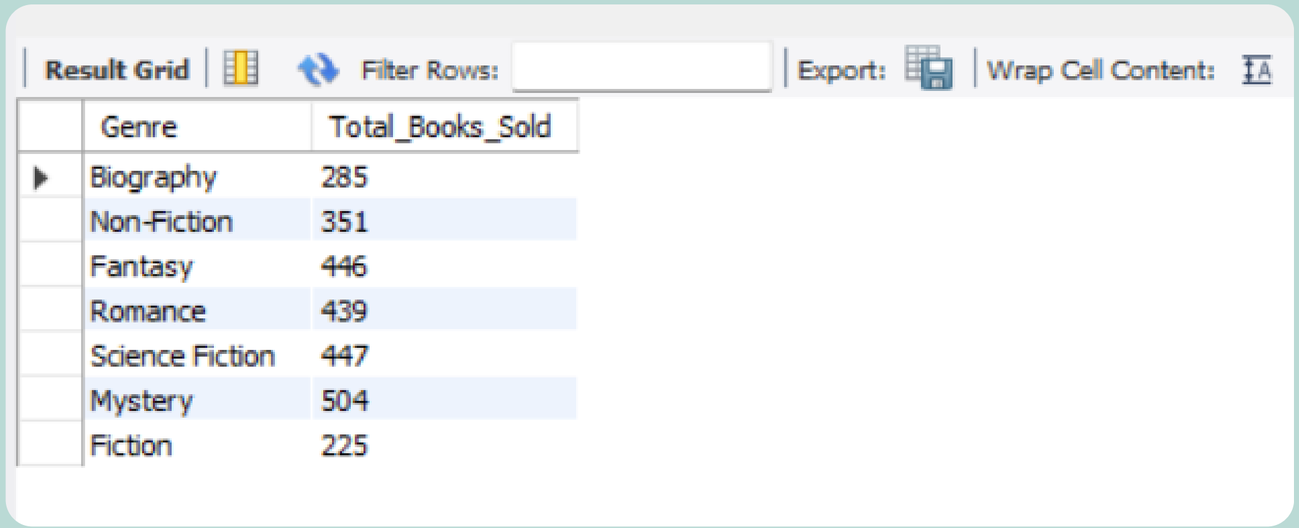
Calculate the total revenue generated from all orders.

```
SELECT SUM(Total_Amount) AS Revenue
FROM Orders;
```



Retrieve the total number of books sold for each genre.

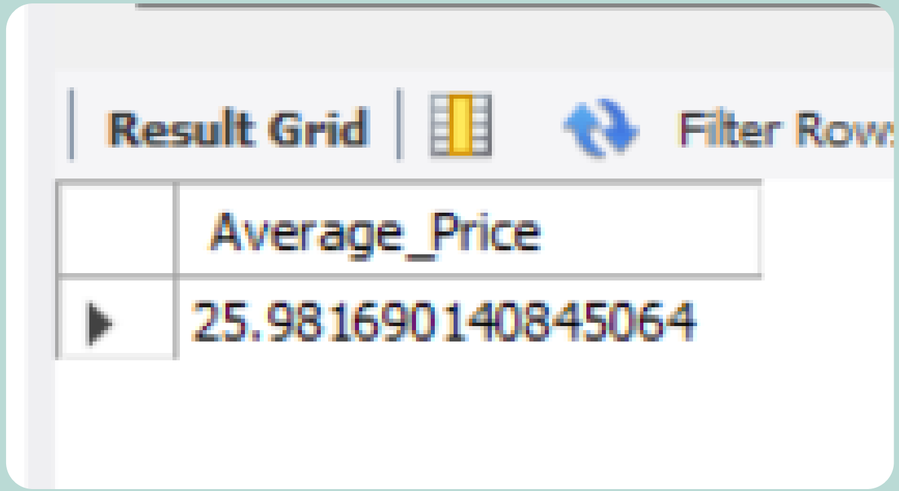
```
SELECT * FROM Orders;
SELECT B.Genre , SUM(O.Quantity) AS
Total_Books_Sold
FROM Orders O
JOIN Books B ON O.Book_ID = B.Book_ID
GROUP BY B.Genre;
```



Genre	Total_Books_Sold
Biography	285
Non-Fiction	351
Fantasy	446
Romance	439
Science Fiction	447
Mystery	504
Fiction	225

Find the average price of books in the 'Fantasy' genre.

```
SELECT AVG(Price) AS Average_Price
FROM Books
WHERE Genre='Fantasy';
```



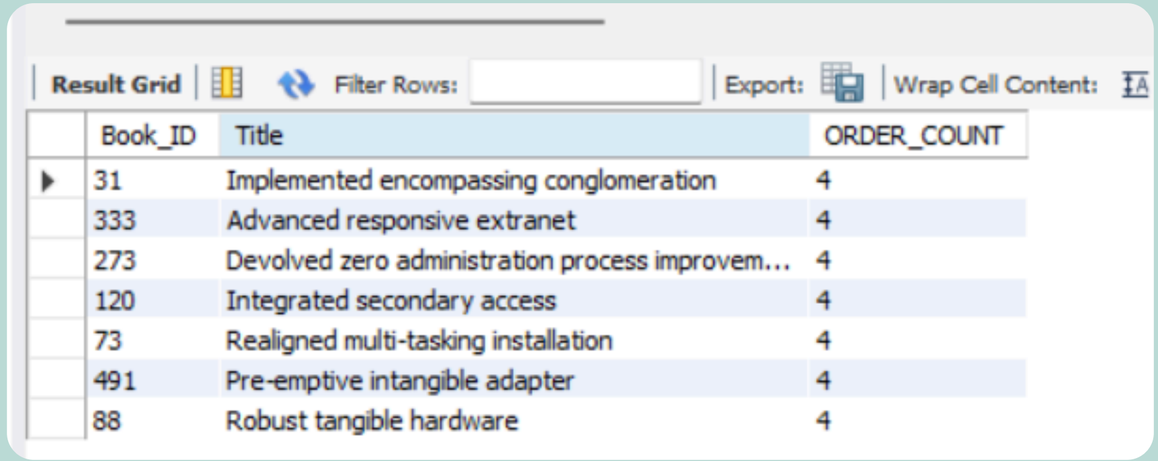
List customers who have placed atleast two orders.

```
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;
```

Customer_ID	Name	ORDER_COUNT
2	Crystal Clements	2
6	Stephen Vasquez	2
8	Matthew Johnson	2
13	Kristine Kim	2
14	John Wood	2
15	Vanessa Gaines	2
16	Stacey Flores	3
21	Edgar Frost	2
22	Stacey Adams	3

Find the most frequently ordered book.

```
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 7;
```

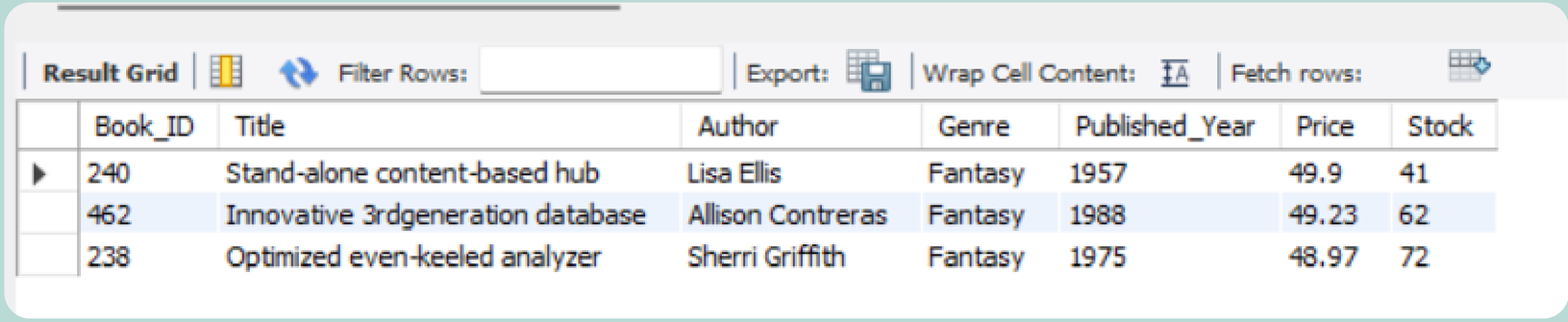


Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Book_ID	Title	ORDER_COUNT
31	Implemented encompassing conglomeration	4
333	Advanced responsive extranet	4
273	Devolved zero administration process improvem...	4
120	Integrated secondary access	4
73	Realigned multi-tasking installation	4
491	Pre-emptive intangible adapter	4
88	Robust tangible hardware	4

Show the top 3 most expensive books of 'Fantasy' genre.

```
SELECT * FROM Books
WHERE Genre = 'Fantasy'
ORDER BY Price DESC LIMIT 3;
```

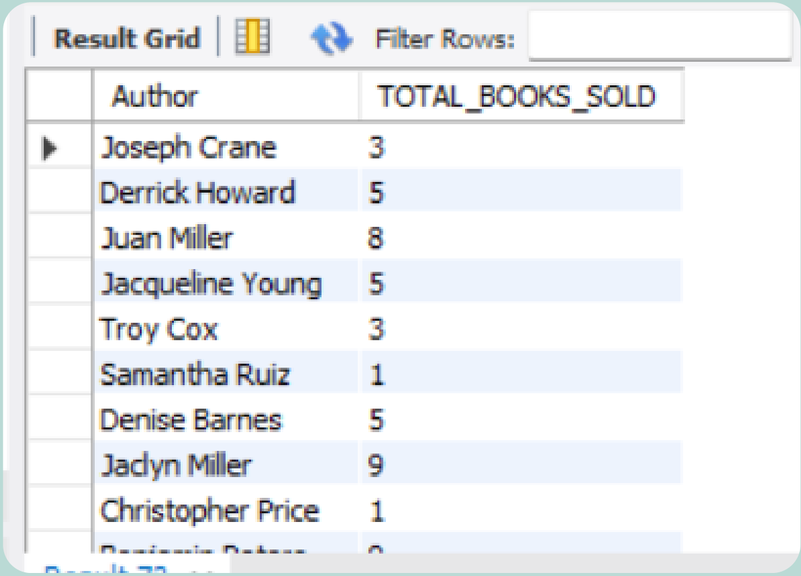


Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

Book_ID	Title	Author	Genre	Published_Year	Price	Stock
240	Stand-alone content-based hub	Lisa Ellis	Fantasy	1957	49.9	41
462	Innovative 3rdgeneration database	Allison Contreras	Fantasy	1988	49.23	62
238	Optimized even-keeled analyzer	Sherri Griffith	Fantasy	1975	48.97	72

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;
```

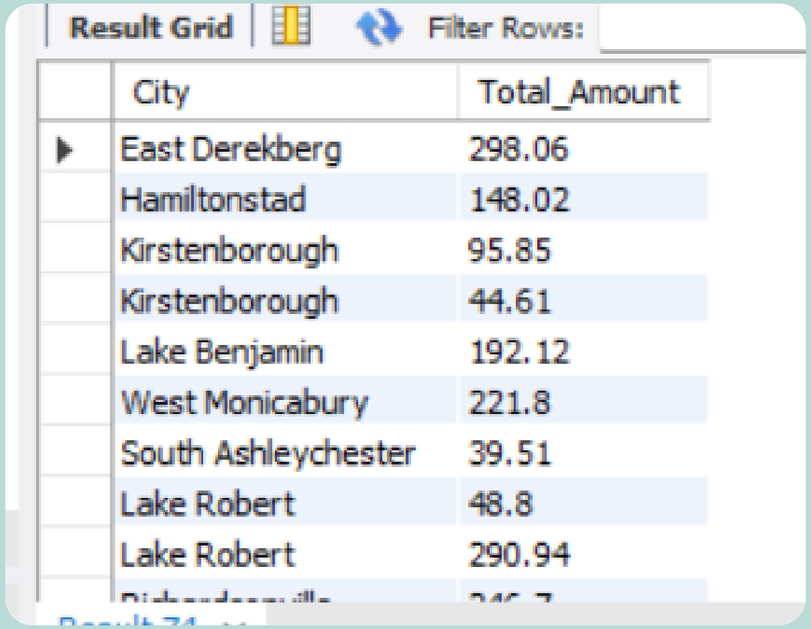


Result Grid | Filter Rows:

Author	TOTAL_BOOKS_SOLD
Joseph Crane	3
Derrick Howard	5
Juan Miller	8
Jacqueline Young	5
Troy Cox	3
Samantha Ruiz	1
Denise Barnes	5
Jaclyn Miller	9
Christopher Price	1

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;
```

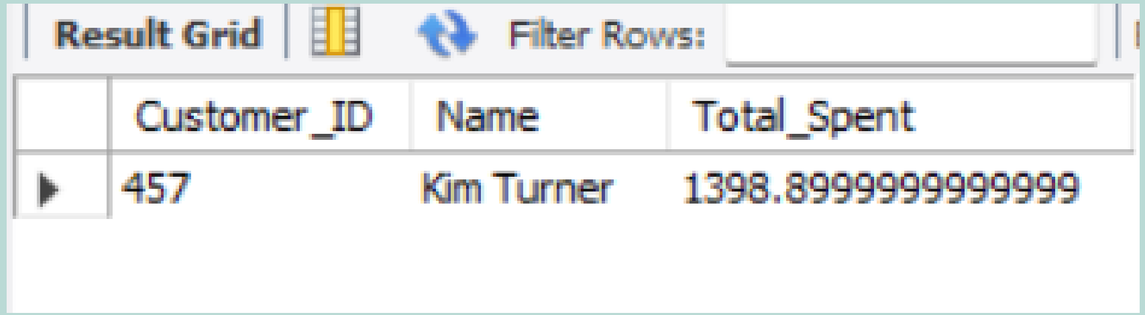


Result Grid | Filter Rows:

City	Total_Amount
East Derekberg	298.06
Hamiltonstad	148.02
Kirstenborough	95.85
Kirstenborough	44.61
Lake Benjamin	192.12
West Monicabury	221.8
South Ashleychester	39.51
Lake Robert	48.8
Lake Robert	290.94

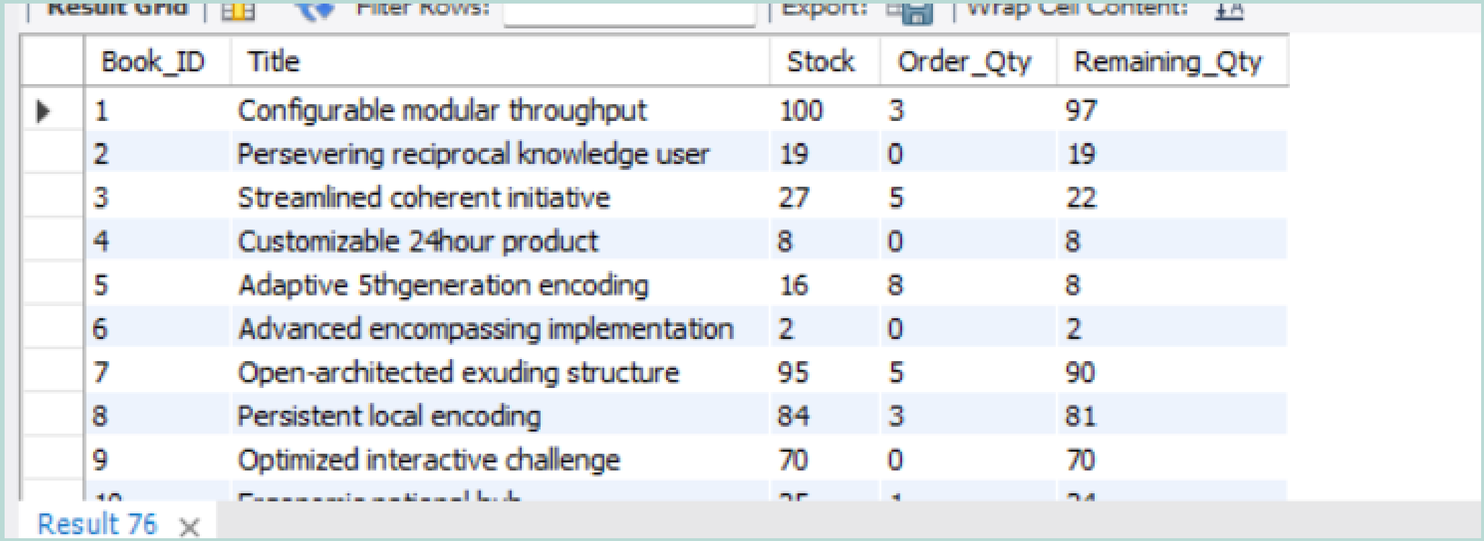
Find the customer who spent the most on orders.

```
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;
```



Calculate the stock remaining after fulfilling all orders.

```
SELECT B.Book_ID, B.Title, B.Stock, COALESCE(SUM(O.Quantity),0) AS Order_Qty,
 B.Stock - COALESCE(SUM(O.Quantity),0) AS Remaining_Qty
FROM Books B
LEFT JOIN Orders O ON B.Book_ID = O.Book_ID
GROUP BY B.Book_ID,B.Title,B.Stock;
```



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Book_ID	Title	Stock	Order_Qty	Remaining_Qty
1	Configurable modular throughput	100	3	97
2	Persevering reciprocal knowledge user	19	0	19
3	Streamlined coherent initiative	27	5	22
4	Customizable 24hour product	8	0	8
5	Adaptive 5thgeneration encoding	16	8	8
6	Advanced encompassing implementation	2	0	2
7	Open-architected exuding structure	95	5	90
8	Persistent local encoding	84	3	81
9	Optimized interactive challenge	70	0	70

Result 76

Thank You