

Online Book Store Data Analysis using SQL

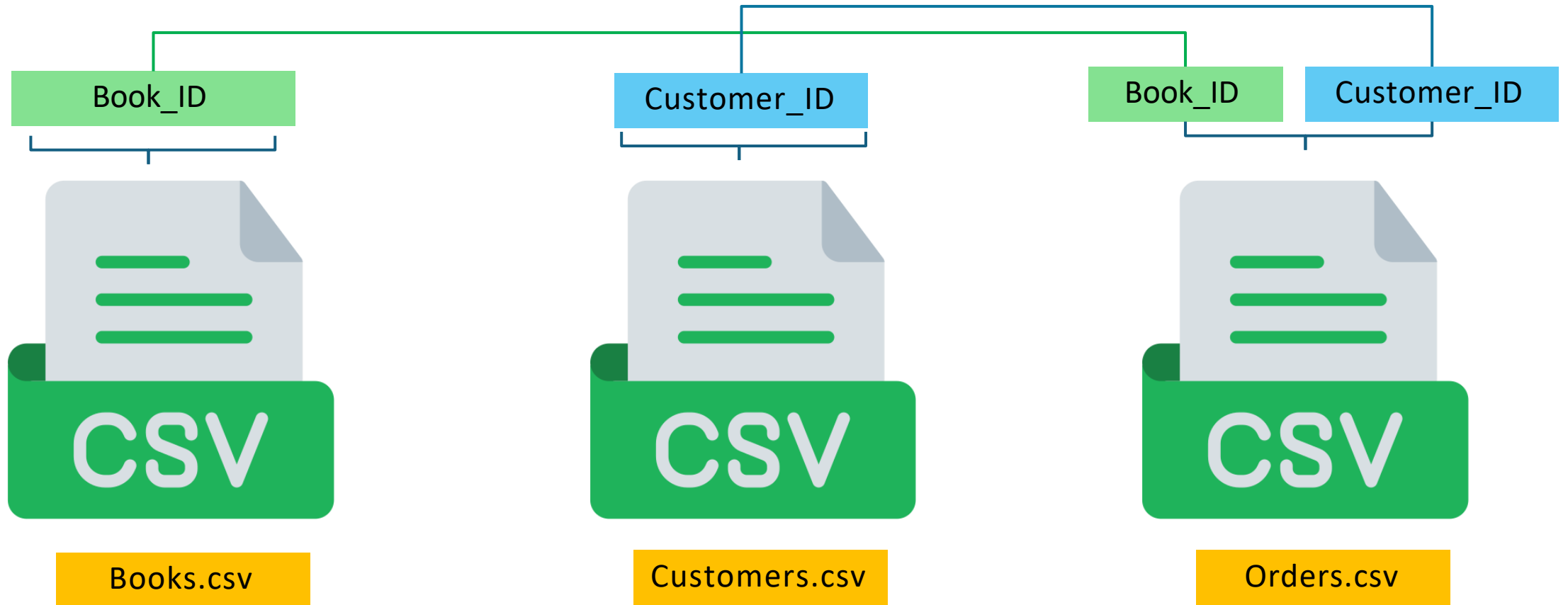
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Introduction

- **Project Objective:** To analyze book sales, customer data, and order trends using SQL queries.
- **Key Focus Areas:** Retrieving, filtering, and summarizing data from multiple tables.
- **Tools Used:** SQL (MySQL Workbench), CSV files.

3 CSV Files

Tables must have at least one common column with same column name and same data type



Basic Questions

1. Retrieve all books in the "Fiction" genre.
2. Find books published after 1950.
3. List all customers from Canada.
4. Show orders placed in November 2023.
5. Retrieve the total stock of books available.
6. Find the details of the most expensive book.
7. Show all customers who ordered more than 1 quantity of a book.
8. Retrieve all orders where the total amount exceeds \$20.
9. List all genres available in the Books table.
10. Find the book with the lowest stock.
11. Calculate the total revenue generated from all orders.

Advance Questions

1. Retrieve the total number of books sold for each genre.
2. Find the average price of books in the "Fantasy" genre.
3. List customers who have placed at least 2 orders.
4. Find the most frequently ordered book.
5. Show the top 3 most expensive books of the "Fantasy" genre.
6. Retrieve the total quantity of books sold by each author.
7. List the cities where customers who spent over \$30 are located.
8. Find the customer who spent the most on orders.
9. Calculate the stock remaining after fulfilling all orders.

Creating Database

```
1 • CREATE DATABASE online_book_store;
```

```
2
```

Creating Books Table

```
4 • CREATE TABLE Books(  
5   Book_ID SERIAL Primary Key,  
6   Title VARCHAR(100),  
7   Author VARCHAR(100),  
8   Genre VARCHAR(50),  
9   Published_Year INT,  
10  Price Numeric(10, 2),  
11  Stock INT  
12 );
```

Result Grid							
		Filter Rows:	Edit:		Export/Import:		Wrap Cell Content:
	Book_ID	Title	Author	Genre	Published_Year	Price	Stock
	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
	12	Polarized optimal array	Destiny Scott	Non-Fiction	1989	27.43	63
	13	Adaptive 5thgeneration orchestration	Jadyn Miller	Romance	1913	14.04	99
	14	Re-engineered demand-driven parallelism	Re-engineered demand-driven parallelism	Non-Fiction	1933	6.04	95
	15	User-friendly motivating strategy	Re-engineered demand-driven parallelism	Non-Fiction	1997	23.83	58
	16	Vision-oriented tangible project	Christopher Price	Mystery	1941	10.07	8
	17	Reduced secondary core	Benjamin Peters	Fantasy	1966	5.37	45
	18	Adaptive 4thgeneration concept	Hector Palmer	Non-Fiction	2021	39.47	32
	19	Progressive asymmetric Internet solution	Sean Miller	Science Fiction	1990	11.31	1
	20	Face-to-face systematic throughput	Teresa Brennan	Non-Fiction	1978	48.13	64
	21	Down-sized static interface	Todd Brown	Biography	1925	47.13	87
	22	Multi-layered optimizing migration	Wesley Escobar	Fiction	1908	39.23	78
	23	Reverse-engineered context-sensitive ...	Christina Hernandez	Mystery	1967	38.55	70
	24	Ergonomic incremental hub	Tanya Mcdonald	Biography	1907	32.74	54
	25	Devolved mobile conglomeration	Alexander Bailey	Biography	1984	8.55	79

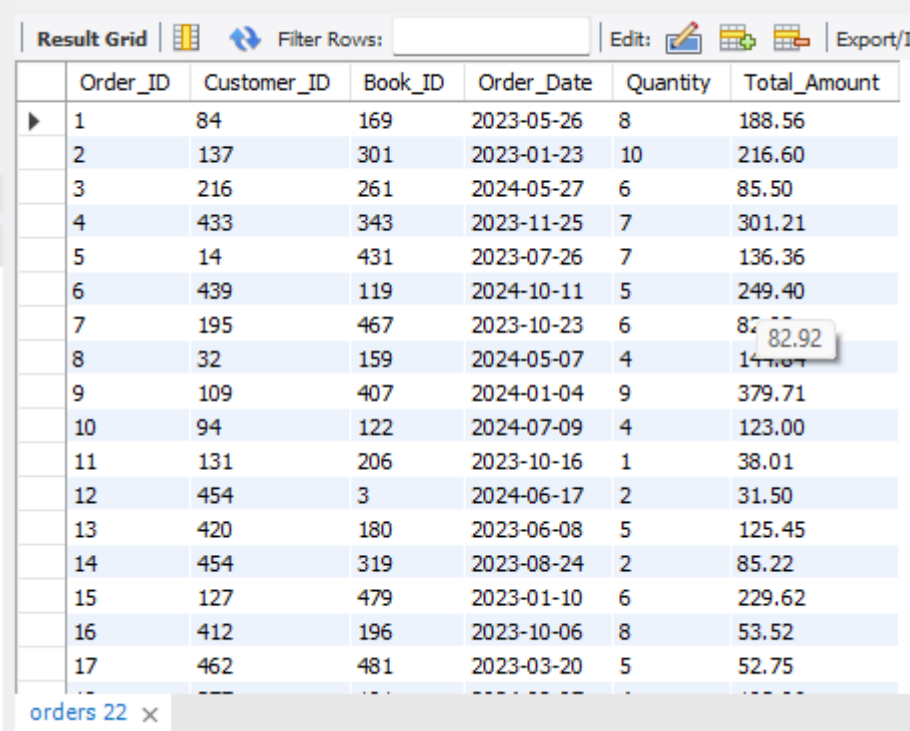
Creating Customers Table

```
15 • CREATE TABLE Customers(  
16   Customer_ID SERIAL Primary Key,  
17   Name VARCHAR(100),  
18   Email VARCHAR(100),  
19   Phone VARCHAR(15),  
20   City VARCHAR(50),  
21   Country VARCHAR(50)  
22 );
```

Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content:						
	Customer_ID	Name	Email	Phone	City	Country
▶	1	Deborah Griffith	balljoseph@wright-keith.net	1234567891	South Craigfort	Denmark
	2	Crystal Clements	kimberlybennett@curtis.com	1234567892	East Derekberg	Nicaragua
	3	Susan Fuller	beanmichael@burnett-stewart.net	1234567893	Austinbury	Equatorial Guinea
	4	Jamie Ramirez	amandahood@warren.com	1234567894	Dianamouth	Slovenia
	5	Marcus Murphy	connerjohn@yahoo.com	1234567895	Smithbury	Guinea-Bissau
	6	Stephen Vasquez	ricemiguel@yahoo.com	1234567896	Hamiltonstad	Rwanda
	7	Susan Hicks	jeffrey91@yahoo.com	1234567897	East Rebecca	Montenegro
	8	Matthew Johnson	austinkenneth@manning.net	1234567898	Kirstenborough	Israel
	9	Matthew Williams	jeffrey41@diaz.com	1234567899	Rebeccafurt	Somalia
	10	Ronald Osborn	staciekelley@heath.com	1234567900	Lake Benjamin	Cameroon
	11	Thomas Garcia	rmiller@gmail.com	1234567901	West Monicabury	Argentina
	12	Jennifer Murray	wilsonbrittany@hotmail.com	1234567902	South Ashleyc...	Zimbabwe
	13	Kristine Kim	sarahwilliams@hotmail.com	1234567903	Lake Robert	Nigeria
	14	John Wood	johnsonalexander@gmail.com	1234567904	Richardsonville	New Caledonia
	15	Vanessa Gaines	tbullock@gmail.com	1234567905	Rodriguezmouth	Wallis and Futuna
	16	Stacey Flores	jackjackson@hotmail.com	1234567906	East Michaelfurt	Saint Helena
	17	Christine Maldon...	ztaylor@yahoo.com	1234567907	Smithborough	Chile

Creating Orders Table

```
25 • CREATE TABLE Orders(  
26   Order_ID SERIAL Primary Key,  
27   Customer_ID INT References Customers(Customer_ID),  
28   Book_ID INT References Books(Book_ID),  
29   Order_Date DATE,  
30   Quantity INT,  
31   Total_Amount NUMERIC(10, 2)  
32 );
```



	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	216.60
	3	216	261	2024-05-27	6	85.50
	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	249.40
	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
	10	94	122	2024-07-09	4	123.00
	11	131	206	2023-10-16	1	38.01
	12	454	3	2024-06-17	2	31.50
	13	420	180	2023-06-08	5	125.45
	14	454	319	2023-08-24	2	85.22
	15	127	479	2023-01-10	6	229.62
	16	412	196	2023-10-06	8	53.52
	17	462	481	2023-03-20	5	52.75

orders 22 x

Basic Questions

1. Retrieve all books in the 'Fiction' genre:

```
6 • SELECT
7     *
8 FROM
9     books
10 WHERE
11     Genre = 'Fiction';
```

Result Grid							
		Filter Rows:	Edit:		Export/Import:	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
	63	Polarized heuristic database	Franklin Mack	Fiction	1989	22.38	56
	100	Synchronized client-server service-desk	James Alvarado	Fiction	1906	49.89	29
	116	Multi-tiered foreground contingency	Jamie Gates	Fiction	1938	41.82	50
	125	Public-key analyzing Graphic Interface	Abigail Madden	Fiction	1990	32.41	16
	130	Realigned context-sensitive pricing structure	Jason Rodriguez	Fiction	2004	6.64	90
	134	Polarized bandwidth-monitored throughput	Linda Newman	Fiction	1955	35.72	49
	142	Multi-tiered responsive parallelism	Amanda Wilson	Fiction	1940	48.96	11
	143	Networked multimedia support	Nancy Goodman	Fiction	2012	43.65	50
	144	Future-proofed scalable software	Matthew Wolf	Fiction	1945	19.27	90
	156	Customized multi-tasking challenge	Brandon Black	Fiction	1953	31.68	24

Basic Questions

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

```
6 • SELECT
7     *
8 FROM
9     books
10 WHERE
11     Genre = 'Fiction';
```

Result Grid							
		Filter Rows:	Edit:		Export/Import:	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
	63	Polarized heuristic database	Franklin Mack	Fiction	1989	22.38	56
	100	Synchronized client-server service-desk	James Alvarado	Fiction	1906	49.89	29
	116	Multi-tiered foreground contingency	Jamie Gates	Fiction	1938	41.82	50
	125	Public-key analyzing Graphic Interface	Abigail Madden	Fiction	1990	32.41	16
	130	Realigned context-sensitive pricing structure	Jason Rodriguez	Fiction	2004	6.64	90
	134	Polarized bandwidth-monitored throughput	Linda Newman	Fiction	1955	35.72	49
	142	Multi-tiered responsive parallelism	Amanda Wilson	Fiction	1940	48.96	11
	143	Networked multimedia support	Nancy Goodman	Fiction	2012	43.65	50
	144	Future-proofed scalable software	Matthew Wolf	Fiction	1945	19.27	90
	156	Customized multi-tasking challenge	Brandon Black	Fiction	1953	31.68	24

Basic Questions

2. Find books published after the year 1950:

```
14 • SELECT
15      *
16 FROM
17      books
18 WHERE
19      Published_Year > 1950;
```

Result Grid							
		Filter Rows:		Edit:		Export/Import:	
	Book_ID	Title	Author	Genre	Published_Year	Price	Stock
▶	2	Persevering reciprocal knowledge user	Mario Moore	Fantasy	1971	35.80	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
	12	Polarized optimal array	Destiny Scott	Non-Fiction	1989	27.43	63
	15	User-friendly motivating strategy	Keith Smith	Non-Fiction	1997	23.83	58
	17	Reduced secondary core	Benjamin Peters	Fantasy	1966	5.37	45
	18	Adaptive 4thgeneration concept	Hector Palmer	Non-Fiction	2021	39.47	32
	19	Progressive asymmetric Internet solution	Sean Miller	Science Fiction	1990	11.31	1
	20	Face-to-face systematic throughput	Teresa Brennan	Non-Fiction	1978	48.13	64
	23	Reverse-engineered context-sensitive ...	Christina Hernandez	Mystery	1967	38.55	70
	25	Devolved mobile conglomeration	Alexander Bailey	Biography	1984	8.55	79
	26	Multi-channeled multi-tasking capability	Patricia Buck	Science Fiction	1964	21.05	41
	30	Multi-layered global open system	Jose Meyer	Biography	2012	30.58	37
	31	Implemented encompassing implementation	Melissa Taylor	Fiction	2010	21.22	44

Basic Questions

3. List all customers from the Canada:

```
22 • SELECT
23      *
24 FROM
25      customers
26 WHERE
27      country = 'canada';
```

Result Grid						
Filter Rows: <input type="text"/>						
Edit:						
Export/Import:						
Wr						
	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
*	NULL	NULL	NULL	NULL	NULL	NULL

Basic Questions

4. Show orders placed in November 2023:

```
30 • SELECT
31      *
32 FROM
33      orders
34 WHERE
35      Order_Date BETWEEN '2023-11-01' AND '2023-11-30'
```

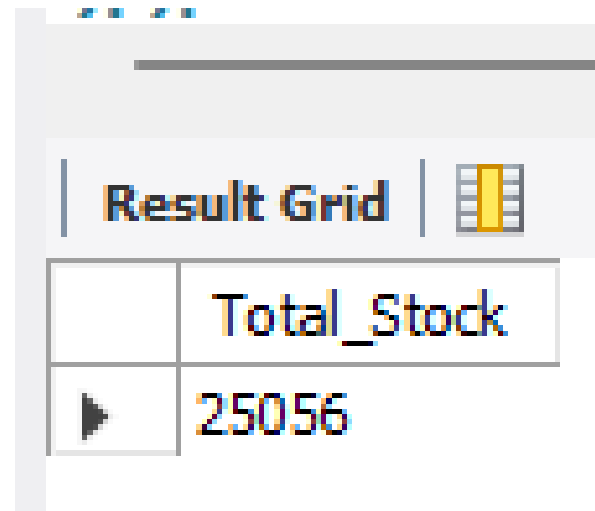
Result Grid						
Filter Rows:						
	Order_ID	Customer_ID	Book_ID	Order_Date	Quantity	Total_Amount
▶	4	433	343	2023-11-25	7	301.21
	19	496	60	2023-11-17	9	316.26
	75	291	375	2023-11-30	5	170.75
	132	469	333	2023-11-22	7	194.32
	137	474	471	2023-11-25	8	363.04
	163	207	384	2023-11-23	3	101.76
	182	129	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
	231	22	384	2023-11-11	1	33.92
	245	386	97	2023-11-01	9	411.66
	252	405	387	2023-11-15	5	237.10
	257	123	403	2023-11-06	1	15.01
	288	6	128	2023-11-13	1	24.04
	307	368	133	2023-11-17	1	20.96
	322	270	112	2023-11-08	2	16.04
	344	385	218	2023-11-25	5	26.80
	389	485	391	2023-11-18	2	66.84
	414	22	334	2023-11-10	1	7.15

orders 26 x

Basic Questions

5. Retrieve the total stock of books available:

```
38 SELECT  
39     SUM(Stock) AS Total_Stock  
40 FROM  
41     books;
```



The screenshot shows a database interface with a 'Result Grid' tab. The grid contains one row with the column header 'Total_Stock' and a value of 25056. A small black arrow icon is visible in the first column of the second row.

	Total_Stock
▶	25056

Basic Questions

6. Find the details of the most expensive book:

```
45 • SELECT
46      *
47 FROM
48      books
49 ORDER BY Price DESC
50 LIMIT 1;
```

Result Grid							
		Filter Rows:		Edit:		Export/Import:	
	Book_ID	Title	Author	Genre	Published_Year	Price	Stock
▶	340	Proactive system-worthy orchestration	Robert Scott	Mystery	1907	49.98	88

Basic Questions

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

```
54 • SELECT
55     *
56 FROM
57     orders
58 WHERE
59     Quantity > 1;
```

Result Grid						
Filter Rows:						
	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	216.60
	3	216	261	2024-05-27	6	85.50
	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	249.40
	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
	10	94	122	2024-07-09	4	123.00
	12	454	3	2024-06-17	2	31.50
	13	420	180	2023-06-08	5	125.45
	14	454	319	2023-08-24	2	85.22
	15	127	479	2023-01-10	6	229.62
	16	412	196	2023-10-06	8	53.52
	17	462	481	2023-03-20	5	52.75
	18	377	101	2024-08-07	4	193.96
	19	496	60	2023-11-17	9	316.26
	21	256	227	2024-12-05	2	120.57

orders 29 ×

Basic Questions

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

```
63 • SELECT
64      *
65 FROM
66      orders
67 WHERE
68      Total_Amount > 20;
```

Result Grid						
Filter Rows:						
Edit: Export/Import						
	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	216.60
	3	216	261	2024-05-27	6	85.50
	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	249.40
	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
	10	94	122	2024-07-09	4	123.00
	11	131	206	2023-10-16	1	38.01
	12	454	3	2024-06-17	2	31.50
	13	420	180	2023-06-08	5	125.45
	14	454	319	2023-08-24	2	85.22
	15	127	479	2023-01-10	6	229.62
	16	412	196	2023-10-06	8	53.52
	17	462	481	2023-03-20	5	52.75
	18	377	101	2024-08-07	4	193.96
	19	406	60	2023-11-17	0	216.26

orders 30 x

Basic Questions

9. List all genres available in the Books table:

```
71 • SELECT DISTINCT
72     genre
73 FROM
74     books;
```

Result Grid	
	genre
▶	Biography
	Fantasy
	Non-Fiction
	Fiction
	Romance
	Science Fiction
	Mystery

Basic Questions

10. Find the book with the lowest stock:

```
77 • SELECT
78      *
79  FROM
80      books
81  ORDER BY Stock ASC
82  LIMIT 1;
```

Result Grid							
		Filter Rows:		Edit:		Export/Import:	
	Book_ID	Title	Author	Genre	Published_Year	Price	Stock
►	44	Networked systemic implementation	Ryan Frank	Science Fiction	1965	13.55	0

Basic Questions

11. Calculate the total revenue generated from all orders:

```
85 • SELECT
86     SUM(Total_Amount) AS Revenue
87 FROM
88     orders;
```

Result Grid	
	Revenue
▶	75628.66

Advance Questions

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

```
4 • SELECT
5     b.genre, SUM(o.Quantity)
6 FROM
7     orders o
8     JOIN
9     books b ON o.Book_ID = b.Book_ID
10 GROUP BY b.genre;
```

Result Grid			Filter Rows:
	genre	SUM(o.Quantity)	
►	Biography	285	
	Fantasy	446	
	Science Fiction	447	
	Mystery	504	
	Romance	439	
	Non-Fiction	351	
	Fiction	225	

Advance Questions

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

```
14 • SELECT
15     ROUND(AVG(Price), 2) AS Average_Price
16 FROM
17     books
18 WHERE
19     Genre = 'Fantasy';
```

Result Grid	
	Average_Price
▶	25.98

Advance Questions

3. List customers who have placed at least 2 orders:

```
23 • SELECT
24     o.Customer_ID, c.Name, COUNT(o.Order_ID) AS Order_Count
25 FROM
26     orders o
27     JOIN
28     customers c ON o.Customer_ID = c.Customer_ID
29 GROUP BY o.Customer_ID , c.Name
30 HAVING COUNT(Order_ID) >= 2;
```

Result Grid			
Filter Rows:			
	Customer_ID	Name	Order_Count
▶	84	Gary Blair	2
	137	Steven Miller	2
	216	Phillip Allen	2
	14	John Wood	2
	195	Dominique Turner	3
	109	Jacob Kelley	2
	94	Mr. David Cox	3
	131	Peter Smith	2
	454	April Anderson	2
	420	Andrew Murray	3
	462	James Brewer	3
	377	Darrell Khan	2
	177	Sarah Powell	2
	119	Alyssa Cuevas	3
	265	Cassandra Cole	3
	305	Jeremy Pena	2
	438	Ebony Ramos	2


Advance Questions

4. Find the most frequently ordered book:

```
34 • SELECT
35     o.Book_ID, b.Title, COUNT(o.Order_ID) AS Order_Count
36 FROM
37     orders o
38     JOIN
39     books b ON o.Book_ID = b.Book_ID
40 GROUP BY o.Book_ID , b.Title
41 ORDER BY Order_Count DESC
42 LIMIT 1;
```

Result Grid





Filter Rows:

Export

	Book_ID	Title	Order_Count
▶	88	Robust tangible hardware	4

Advance Questions

5. Show the top 3 most expensive books of 'Fantasy' Genre :

```
45 • SELECT
46      *
47 FROM
48      books
49 WHERE
50      genre = 'Fantasy'
51 ORDER BY Price DESC
52 LIMIT 3;
```

	Book_ID	Title	Author	Genre	Published_Year	Price	Stock
►	240	Stand-alone content-based hub	Lisa Ellis	Fantasy	1957	49.90	41
	462	Innovative 3rdgeneration database	Allison Contreras	Fantasy	1988	49.23	62
	238	Optimized even-keeled analyzer	Sherri Griffith	Fantasy	1975	48.97	72

Advance Questions

6. Retrieve the total quantity of books sold by each author:

```
56 • SELECT
57     b.Author, SUM(o.Quantity) AS Total_Books_Sold
58 FROM
59     orders o
60     JOIN
61     books b ON o.Book_ID = b.Book_ID
62 GROUP BY b.Author;
```

Result Grid			Filter Rows:
	Author	Total_Books_Sold	
▶	Margaret Moore	8	
	John Davidson	13	
	Christopher Fuentes	6	
	Marissa Smith	16	
	Christopher Dixon	15	
	Tonya Saunders	21	
	Larry Hunt	6	
	Brandon Foster	4	
	Michelle Bell	11	
	Mary French	14	
	Lisa Lopez	1	
	Derrick Howard	5	
	David Rodriguez	5	
	Michael Mckenzie	12	
	Christian Morales	12	
	Rachel Gibbs	22	
	Nicole Smith	5	
	Amanda Knight	10	

Advance Questions

7. List the cities where customers who spent over \$30 are located:


```
66 • SELECT DISTINCT
67     c.City, Total_Amount
68 FROM
69     orders o
70     JOIN
71     customers c ON o.Customer_ID = c.Customer_ID
72 WHERE
73     Total_Amount > 30;
```

Result Grid			Filter Rows:
	City	Total_Amount	
▶	Lake Paul	188.56	
	North Keith	216.60	
	Kelseyfort	85.50	
	East David	301.21	
	Richardsonville	136.36	
	Ramosstad	249.40	
	Rogersborough	82.92	
	New Carlosbury	144.84	
	Ravenberg	379.71	
	West Anthony	123.00	
	North Carolyn	38.01	
	Micheleborough	31.50	
	North Joseph	125.45	
	Micheleborough	85.22	
	Lake Mary	229.62	
	Lake Karen	53.52	
	Chandlerberg	52.75	

Advance Questions

8. Find the customer who spent the most on orders:

```
77 • SELECT
78     c.Customer_ID, c.Name, SUM(o.Total_Amount) AS Total_Spend
79 FROM
80     orders o
81     JOIN
82     customers c ON o.Customer_ID = c.Customer_ID
83 GROUP BY c.Customer_ID , c.Name
84 ORDER BY Total_Spend DESC
85 LIMIT 1;
```

Result Grid  Filter Rows: <input type="text"/>			
	Customer_ID	Name	Total_Spend
▶	457	Kim Turner	1398.90

Advance Questions

9. Calculate the stock remaining after fulfilling all orders:

```
88 • SELECT b.book_id, b.title, b.stock, COALESCE(SUM(o.quantity),0) AS Order_quantity,  
89       b.stock- COALESCE(SUM(o.quantity),0) AS Remaining_Quantity  
90 FROM books b  
91 LEFT JOIN orders o ON b.book_id=o.book_id  
92 GROUP BY b.book_id ORDER BY b.book_id;
```

Result Grid						Export:	Wrap Cell Content:
Filter Rows:							
	book_id	title	stock	Order_quantity	Remaining_Quantity		
▶	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		
	10	Ergonomic national hub	25	1	24		
	11	Secured zero tolerance time-frame	10	5	5		
	12	Polarized optimal array	63	0	63		
	13	Adaptive 5thgeneration orchestration	99	9	90		
	14	Re-engineered demand-driven parallelism	95	0	95		
	15	User-friendly motivating strategy	58	0	58		
	16	Vision-oriented tangible project	8	1	7		
	17	Reduced secondary core	45	9	36		
	18	Adaptive 4thgeneration concept	32	14	18		