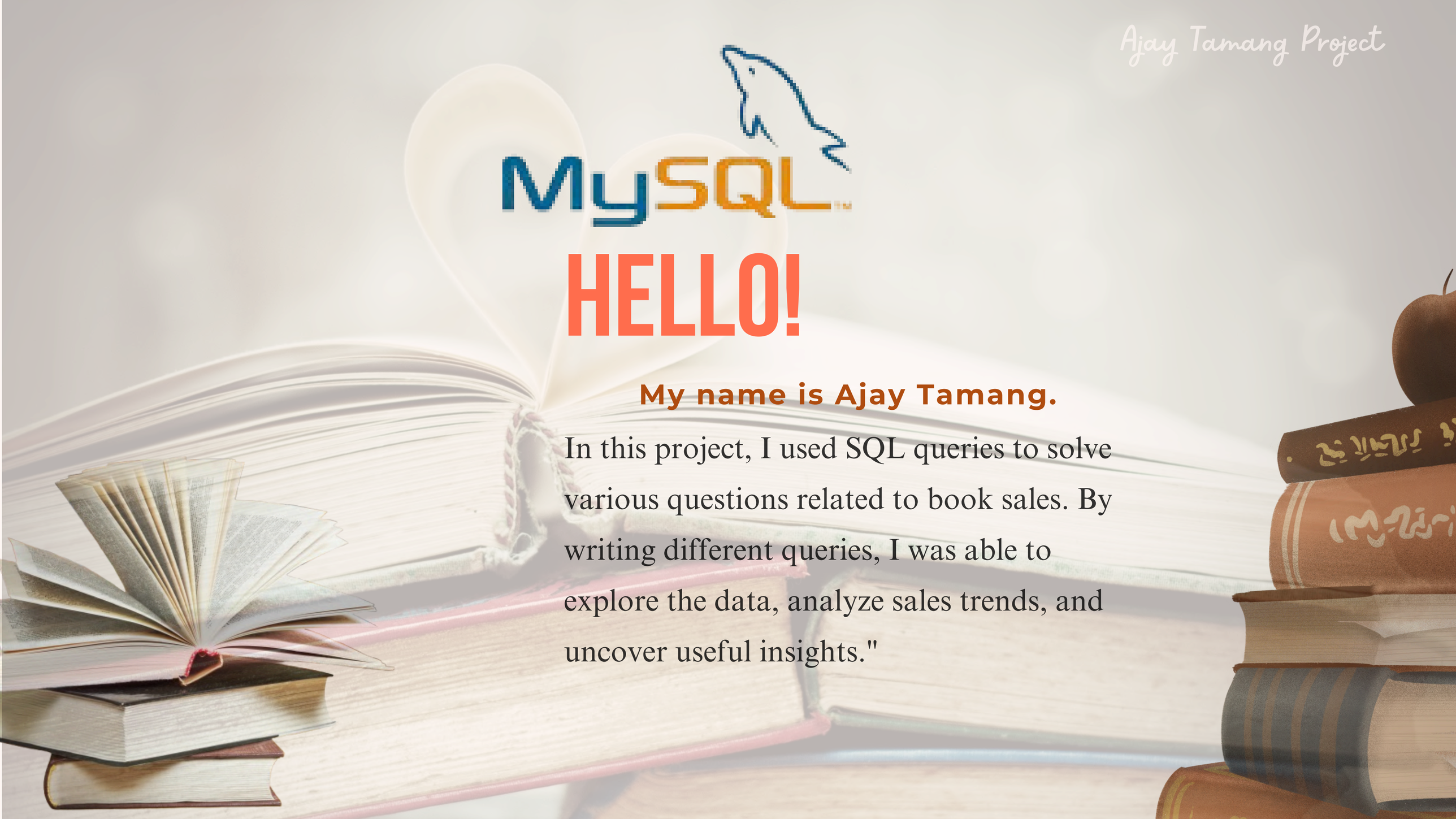
BOOK SALES
ANALYSIS WITH SQL

Ajay Tamang Project



HELLO!

My name is Ajay Tamang.

In this project, I used SQL queries to solve various questions related to book sales. By writing different queries, I was able to explore the data, analyze sales trends, and uncover useful insights."

DATABASE SCHEMA OVERVIEW

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TABLE NAME: Customers

Result Grid | Filter Rows: | Edit: | Expor

Order_ID	Customer_ID	Book_ID	Order_Date	Quantity	Total_Amount
1	84	169	2023-05-26	8	189
2	137	301	2023-01-23	10	217
3	216	261	2024-05-27	6	86
4	433	343	2023-11-25	7	301
5	14	433	2023-07-26	7	136
6	439	119	2024-10-11	5	249
7	195	467	2023-10-23	6	83

TABLE NAME: Orders

Order_ID	Customer_ID	Book_ID	Order_Date	Quantity	Total_Amount
1	84	169	2023-05-26	8	189
2	137	301	2023-01-23	10	217
3	216	261	2024-05-27	6	86
4	433	343	2023-11-25	7	301
5	14	433	2023-07-26	7	136
6	439	119	2024-10-11	5	249
7	195	467	2023-10-23	6	83
8	32	159	2024-05-07	4	145
9	109	407	2024-01-04	9	380
10	94	122	2024-07-09	4	123
11	131	206	2023-10-16	1	38

TABLE NAME: Books

Book_ID	Title	Author	Genre	Published_Year	Price	Stock
1	Configurable modular throughput	Joseph Crane	Biography	1949	21.34	100
2	Persevering reciprocal knowledge user	Mario Moore	Fantasy	1971	35.8	19
3	Streamlined coherent initiative	Derrick Howard	Non-Fiction	1913	15.75	27
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
7	Open-architected exuding structure	Jacqueline Young	Romance	1927	43.63	95
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

QUESTIONS?

1) Retrive all the books in the "fiction" genre.
2) Find the books published after the year 1950.
3) List all customer 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.

Continue....

QUESTIONS?

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

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

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

15) Find the most frequently ordered book.

16) Show the top 3 most expensive books of "fantasy" genre.

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

18) List the cities where customers who spent over $30 are located(based on Total Amount).

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

20) Calculate the stock remaining after fulfilling all orders.

1) RETRIVE ALL THE BOOKS IN THE "FICTION" GENRE

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```
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
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

MySQL

2) FIND THE BOOKS PUBLISHED AFTER THE YEAR 1950

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```
select * from books where Published_Year>1950
order by Published_Year;
```

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

Book_ID	Title	Author	Genre	Published_Year	Price	Stock
166	Customizable discrete Graphical User Interface	Rebecca Alexander	Romance	1951	11.02	56
174	Pre-emptive executive knowledge user	Rebecca Mann	Mystery	1951	37.83	18
432	Horizontal disintermediate alliance	Rodney Ward	Non-Fiction	1951	8.84	55
43	Function-based zero-defect initiative	Daniel Nunez	Romance	1952	47.39	61
150	Phased logistical open system	Jenna Henderson	Biography	1952	31.95	32
62	Re-contextualized real-time strategy	Nicole Lynch	Fiction	1953	26.34	23
156	Synergistic grid-enabled website	Brandon Black	Fiction	1953	31.68	34
243	Automated systemic toolset	Tiffany Conley	Fantasy	1953	8.87	65
457	Configurable disintermediate extranet	Melissa Lewis	Mystery	1953	28.22	2
167	User-friendly radical standardization	Leon Davis	Science Fiction	1954	36.02	55
193	Customer-focused tertiary methodology	Justin Garcia	Fantasy	1954	29.54	100
242	Business-focused responsive parallelism	Amy Reyes	Mystery	1954	33.79	38
37	Up-sized tertiary archive	Todd Kennedy	Fantasy	1955	13.08	3
49	Robust attitude-oriented attitude	Zachary Hayes	Biography	1955	49.5	15
102	Ergonomic stable open architecture	Robin Brown	Romance	1955	40.22	31

MySQL

3) LIST ALL CUSTOMER FROM CANADA


```
select * from customers where country="canada";
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wra

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

MySQL

4) SHOW ORDERS PLACED IN NOVEMBER 2023

Ajay Tamang Project

```sql
select * from orders
where month(Order_Date)=11
and year(order_date)=2023;
-- OR
SELECT * FROM Orders
WHERE order_date BETWEEN '2023-11-01' AND '2023-11-30';
```

Result Grid | Filter Rows: | Edit: | Export/I

Order_ID	Customer_ID	Book_ID	Order_Date	Quantity	Total_Amount
4	433	343	2023-11-25	7	301
19	496	60	2023-11-17	9	316
75	291	375	2023-11-30	5	171
132	469	333	2023-11-22	7	194
137	474	471	2023-11-25	8	363
163	207	384	2023-11-23	3	102
182	129	293	2023-11-01	7	126
200	313	303	2023-11-23	1	7
213	325	447	2023-11-17	7	254
231	22	384	2023-11-11	1	34
245	386	97	2023-11-01	9	412
252	405	387	2023-11-15	5	237
257	123	403	2023-11-06	1	15
288	6	128	2023-11-13	1	24
307	368	133	2023-11-17	1	21

5) RETRIEVE THE TOTAL STOCK OF BOOKS AVAILABLE

Ajay Tamang Project

```
select sum(stock) as Total_stock_book_available from books;
```

Result Grid | Filter Rows:

Total_stock_book_available
25056

MySQL

6) FIND THE DETAILS OF THE MOST EXPENSIVE BOOK

Ajay Tamang Project

```sql
select * from books order by price desc limit 1;
-- or
select * from books where price=(select max(price) from books);
```

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

7) SHOW ALL CUSTOMERS WHO ORDERED MORE THAN 1 QUANTITY OF A BOOK

Ajay Tamang Project

```
select orders.order_ID,orders.customer_ID,customers.name,sum(orders.quantity) as Order_quantity
from customers join orders on customers.customer_ID=orders.customer_ID
group by orders.order_ID,orders.Customer_ID,customers.name
having Order_quantity>1;
```

Result Grid | Filter Rows: | Export:

order_ID	customer_ID	name	Order_quantity
1	84	Gary Blair	8
2	137	Steven Miller	10
3	216	Phillip Allen	6
4	433	Corey Wells	7
5	14	John Wood	7
6	439	Shane Chang	5
7	195	Dominique Turner	6
8	32	Jeffrey Shannon	4
9	109	Jacob Kelley	9
10	94	Mr. David Cox	4
12	454	April Anderson	2
13	420	Andrew Murray	5
14	454	April Anderson	2
15	127	Joseph Mcmahon	6
16	412	Kevin Woodward	8

MySQL

8) RETRIEVE ALL ORDERS WHERE THE TOTAL AMOUNT EXCEEDS $20

Ajay Tamang Project

```
select * from orders where Total_Amount>20 ;
```

Order_ID	Customer_ID	Book_ID	Order_Date	Quantity	Total_Amount
1	84	169	2023-05-26	8	189
2	137	301	2023-01-23	10	217
3	216	261	2024-05-27	6	86
4	433	343	2023-11-25	7	301
5	14	431	2023-07-26	7	136
6	439	119	2024-10-11	5	249
7	195	467	2023-10-23	6	83
8	32	159	2024-05-07	4	145
9	109	407	2024-01-04	9	380
10	94	122	2024-07-09	4	123
11	131	206	2023-10-16	1	38
12	454	3	2024-06-17	2	32
13	420	180	2023-06-08	5	125
14	454	319	2023-08-24	2	85
15	127	479	2023-01-10	6	230

9) LIST ALL GENRES AVAILABLE IN THE BOOKS TABLE

Ajay Tamang Project

```
select distinct genre from books;
```

Result Grid

genre
Biography
Fantasy
Non-Fiction
Fiction
Romance
Science Fiction
Mystery

MySQL

10) FIND THE BOOK WITH THE LOWEST STOCK

Ajay Tamang Project

```
select * from books
where stock=(select min(stock) from books);
```

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

Book_ID	Title	Author	Genre	Published_Year	Price	Stock
44	Networked systemic implementation	Ryan Frank	Science Fiction	1965	13.55	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
163	Object-based eco-centric challenge	Douglas Mccarthy	Non-Fiction	1905	19.11	0
378	Future-proofed heuristic function	Samantha Mcclain	Romance	1903	6.01	0

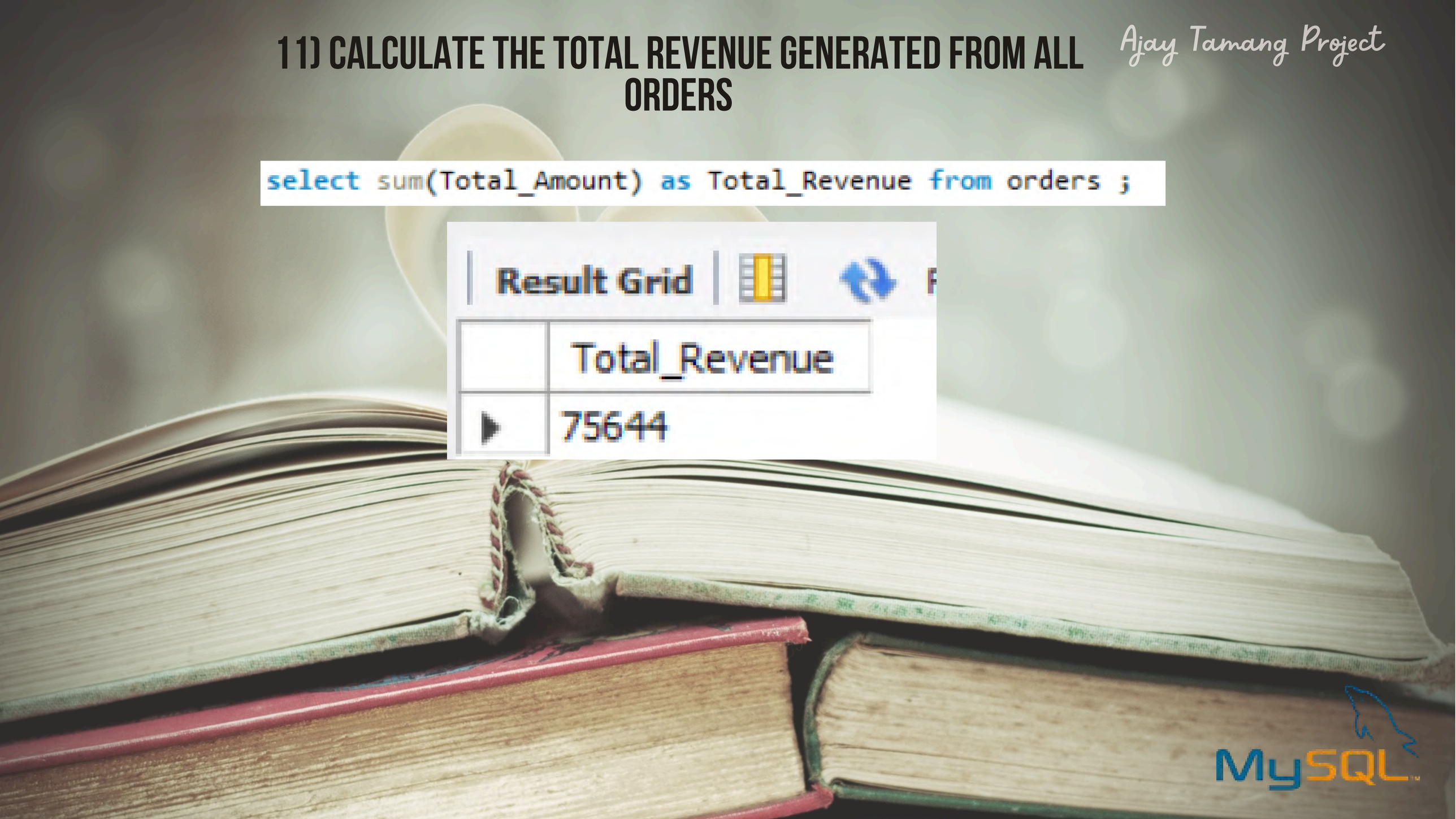
11) CALCULATE THE TOTAL REVENUE GENERATED FROM ALL ORDERS

Ajay Tamang Project

```
select sum(Total_Amount) as Total_Revenue from orders ;
```

Result Grid

	Total_Revenue
▶	75644



MySQL

12) RETRIEVE THE TOTAL NUMBER OF BOOKS SOLD FOR EACH GENRE

Ajay Tamang Project

```
select books.genre,sum(orders.quantity) as total_no_of_book_sold from books
join orders on books.Book_ID=orders.Book_ID
group by books.genre;
```

Result Grid | Filter Rows:

genre	total_no_of_book_sold
Biography	285
Non-Fiction	351
Fantasy	446
Romance	439
Science Fiction	447
Mystery	504
Fiction	225

MySQL

13) FIND THE AVERAGE PRICE OF BOOKS IN THE "FANTASY" GENRE


```
select avg(price) as avg_price
from books
where genre="fantasy";
```

Result Grid | Filter Rows:

avg_price
25.981690140845064

MySQL

14) LIST CUSTOMERS WHO HAVE PLACED AT LEAST 2 ORDERS

Ajay Tamang Project

```
select customers.Customer_ID,customers.Name,count(orders.customer_ID) as order_count
from orders join customers
on orders.Customer_ID=customers.Customer_ID
group by customers.Customer_ID,customers.Name
having order_count>=2;
```

```
select Customer_ID,name,order_count from(select customers.Customer_ID,customers.name,
count(orders.Customer_ID) as order_count from orders
join customers
on orders.Customer_ID=customers.Customer_ID
group by customers.Customer_ID,customers.name) as xyz where order_count>=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

Result 7

15) FIND THE MOST FREQUENTLY ORDERED BOOK

Ajay Tamang Project

```
select books.Book_ID,books.title, count(orders.Book_ID) as ordered_count
from books join orders
on books.Book_ID=orders.Book_ID
group by books.Book_ID,books.Title
having ordered_count=(select max(ordered_count) from (
select books.Book_ID,count(orders.Book_ID) as ordered_count
from books join orders
on books.Book_ID=orders.Book_ID
group by books.Book_ID) as xyz);
```

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

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

MySQL

16) SHOW THE TOP 3 MOST EXPENSIVE BOOKS OF "FANTASY" GENRE

Ajay Tamang Project

```
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

17) RETRIEVE THE TOTAL QUANTITY OF BOOKS SOLD BY EACH AUTHOR

Ajay Tamang Project

```
select books.Author,sum(orders.Quantity) as Total_quantity_sold
from books join orders
on books.Book_ID=orders.Book_ID
group by books.Author
order by Total_quantity_sold desc;
```

Result Grid | Filter Rows:

Author	Total_quantity_sold
Patrick Contreras	28
Melissa Taylor	27
Thomas Trujillo	24
Emily James	24
Sheena Harris	23
Ellen Doyle	23
Erica Parker	23
Valerie Moore	23
Amanda Wilson	22
Rachel Gibbs	22
Kristi Phillips	21

Result 1

MySQL

18) LIST THE CITIES WHERE CUSTOMERS WHO SPENT OVER $30 ARE LOCATED(BASED ON TOTAL AMOUNT)

Ajay Tamang Project

```sql
select customers.city,sum(orders.Total_Amount) as Total_Amount_spend from
customers join orders
on customers.customer_ID=orders.Customer_ID
group by customers.City
having Total_Amount_spend>30
order by Total_Amount_spend asc;
```

```sql
select city,Total_Amount_spend from(
select customers.City,sum(orders.Total_Amount) as Total_Amount_spend from
customers join orders
on customers.Customer_ID=orders.Customer_ID
group by customers.city) as xyz where Total_Amount_spend>30
order by Total_Amount_spend asc;
```

Result Grid | Filter Rows:

city	Total_Amount_spend
Nelsonmouth	31
North Emily	32
Conniefort	33
Parkerside	
West Justin	34
Patriciaville	35
South Ashleychester	40
Angelaside	42
Marktown	42
Darlenehaven	42
Christophertown	42
North Rodney	43
Port Austinview	43

Conniefort

Result 5

MySQL

19) FIND THE CUSTOMER WHO SPENT THE MOST ON ORDERS

Ajay Tamang Project

```sql
select customers.name,sum(orders.Total_Amount) as TA from
customers join orders
on customers.Customer_ID=orders.Customer_ID
group by customers.name
order by TA desc limit 1;
```

```sql
-- OR
select customers.Name,sum(orders.Total_Amount) as TA from
customers join orders on
customers.Customer_ID=orders.Customer_ID
group by customers.Name
having TA=(select max(TA) from ( select customers.name,sum(orders.Total_Amount) as TA from
customers join orders on
customers.Customer_ID=orders.Customer_ID
group by customers.name) as xyz);
```

Result Grid

Name	TA
Kim Turner	1399

MySQL

20) CALCULATE THE STOCK REMAINING AFTER FULFILLING ALL ORDERS

Ajay Tamang Project

```
select books.Book_ID,books.Title,books.Stock,sum(orders.Quantity) as ordered_quantity, books.Stock-sum(orders.Quantity) as remaining_stocks
from books join orders
on books.Book_ID=orders.Book_ID
group by books.Book_ID,books.Title,books.Stock;
```

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

Book_ID	Title	Stock	ordered_quantity	remaining_stocks
1	Configurable modular throughput	100	3	97
3	Streamlined coherent initiative	27	5	22
5	Adaptive 5thgeneration encoding	16	8	8
7	Open-architected exuding structure	95	5	90
8	Persistent local encoding	84	3	81
10	Ergonomic national hub	25	1	24
11	Secured zero tolerance time-frame	10	5	5
13	Adaptive 5thgeneration orchestration	99	9	90
16	Vision-oriented tangible project	8	1	7

Result 10

THANK YOU FOR ATTENTION

See You Next

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MySQL