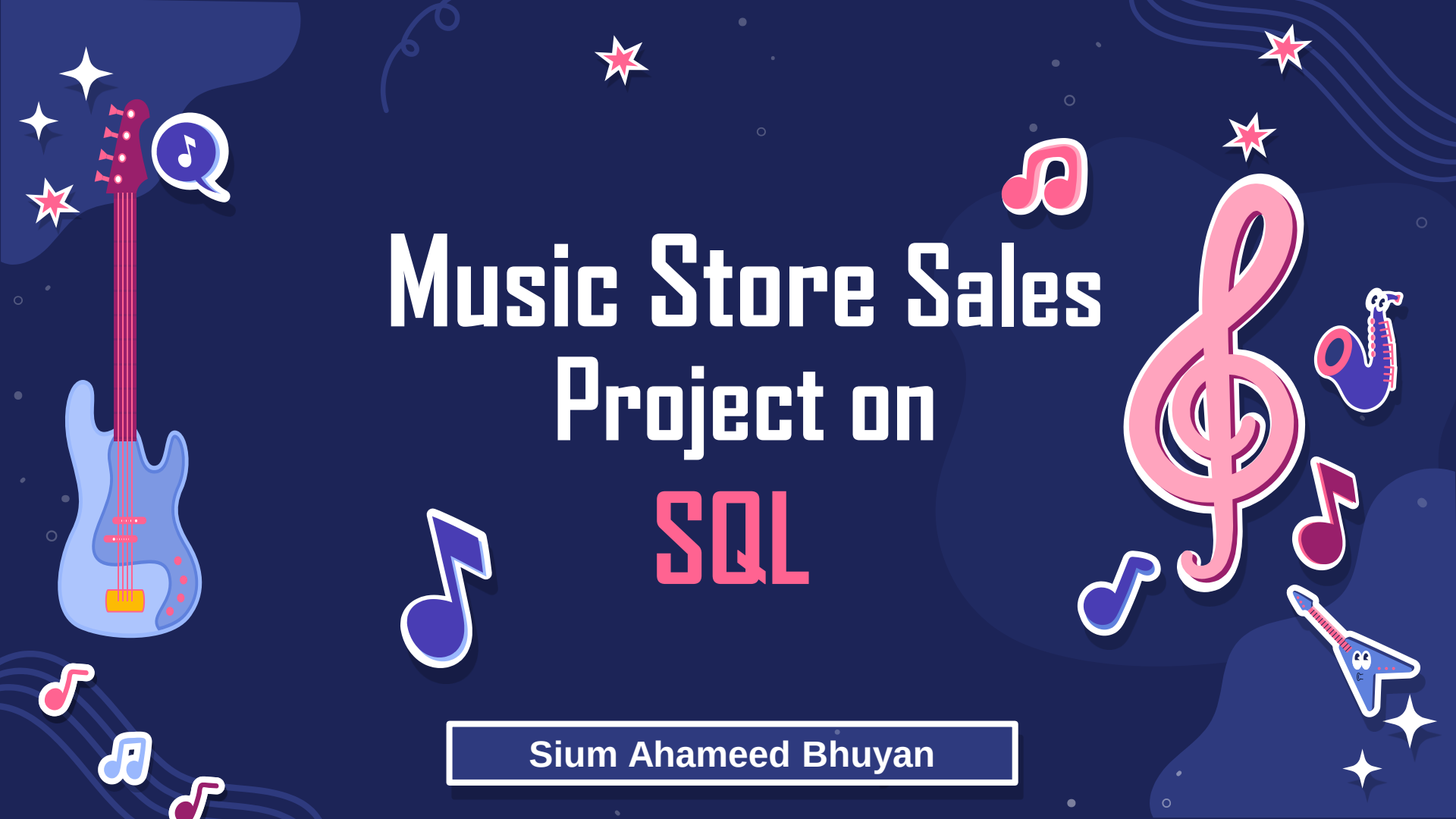
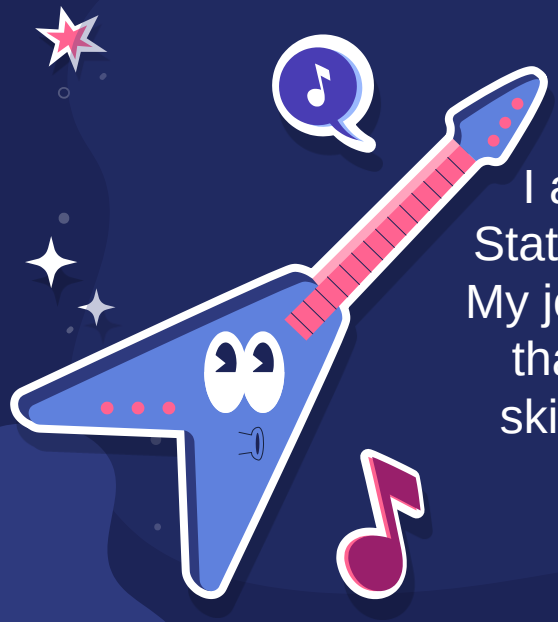

Music Store Sales
Project on
SQL
Sium Ahameed Bhuyan

Hello!

Welcome to my SQL project.



I am Sium Ahameed, currently pursuing my education in Statistics with a focused ambition to become a data scientist. My journey in data science is guided by a structured roadmap that I meticulously follow to ensure I acquire the essential skills and knowledge needed to excel in this dynamic field.
I am practicing SQL through some projects.
This projects is one of them.

Have a lovely time…..

List of Queries :

Easy:

1: Find 3 most senior employee based on job title?
2: Top 5 countries which have the most Invoices?
3: What are top 3 values of total invoice?
4: Which are the top 5 city has the best customers? Return both the city name & sum of all invoice totals.
5: Who is the best 3 customer? Best customer will be count based on spending money.

Intermediate:

1: Let's invite the 5 artists who have written the most rock music in our dataset.
2: Write query to return the email, first name, last name, & Genre of all Rock Music listeners. Return your list ordered alphabetically by email starting with A.
3: Return all the track names that have a song length longer than the average song length.

Advance:

1: Find out the most popular music Genre for each country. We determine the most popular genre as the Genre with the highest amount of purchases.

1: Find 3 most senior employee based on job title?

```sql
SELECT
    employee_id, first_name, last_name, levels
FROM
    employee
ORDER BY levels DESC;
```

employee_id	first_name	last_name	levels
1	Andrew	Adams	L6
2	Nancy	Edwards	L4
6	Michael	Mitchell	L3

2: Top 5 countries which have the most Invoices?

```sql
SELECT
    billing_country, COUNT(*) AS c
FROM
    invoice
GROUP BY billing_country
ORDER BY c DESC LIMIT 5;
```

billing_country	c
USA	131
Canada	76
Brazil	61
France	50
Germany	41

3: What are top 3 values of total invoice?

```sql
SELECT
    total
FROM
    invoice
ORDER BY total DESC
LIMIT 3;
```

	total
▶	23.759999999999998
	19.8
	19.8

4: Which are the top 5 city has the best customers? Return both the city name & sum of all invoice totals.

```sql
SELECT
    billing_city, SUM(total) AS TotalInvoices
FROM
    invoice
GROUP BY billing_city
ORDER BY TotalInvoices DESC
LIMIT 5;
```

billing_city	TotalInvoices
Prague	273.24000000000007
Mountain View	169.29
London	166.32
Berlin	158.4
Paris	151.47

5: Who is the best 3 customer? Best customer will be count based on spending money.

```sql
SELECT
    customer.customer_id,
    first_name,
    last_name,
    SUM(total) AS total_spending
FROM
    customer
        JOIN
    invoice ON customer.customer_id = invoice.customer_id
GROUP BY customer.customer_id , first_name , last_name
ORDER BY total_spending DESC
LIMIT 3;
```

customer_id	first_name	last_name	total_spending
5	FrantiÅiek	WichterlovÃ¡	144.54000000000002
6	Helena	HolÃ½	128.7
46	Hugh	O'Reilly	114.83999999999997

6: Let's invite the 5 artists who have written the most rock music in our dataset.

```sql
SELECT artist.artist_id, artist.name,COUNT(artist.artist_id) AS number_of_songs
FROM track
JOIN album ON album.album_id = track.album_id
JOIN artist ON artist.artist_id = album.artist_id
JOIN genre ON genre.genre_id = track.genre_id
WHERE genre.name LIKE 'Rock'
GROUP BY artist.artist_id, artist.name
ORDER BY number_of_songs DESC
LIMIT 5;
```

artist_id	name	number_of_songs
1	AC/DC	18
3	Aerosmith	15
8	Audioslave	14
22	Led Zeppelin	14
4	Alanis Morissette	13

7: Write query to return the email, first name, last name, & Genre of all Rock Music listeners. Return your list ordered alphabetically by email starting with A.

```
SELECT DISTINCT first_name AS FirstName, last_name AS LastName,email AS Email, genre.name AS Name
FROM customer
JOIN invoice ON invoice.customer_id = customer.customer_id
JOIN invoice_line ON invoice_line.invoice_id = invoice.invoice_id
JOIN track ON track.track_id = invoice_line.track_id
JOIN genre ON genre.genre_id = track.genre_id
WHERE genre.name   LIKE 'Rock'
ORDER BY email;
```

FirstName	LastName	Email	Name
Aaron	Mitchell	aaronmitchell@yahoo.ca	Rock
Alexandre	Rocha	alero@uol.com.br	Rock
Astrid	Gruber	astrid.gruber@apple.at	Rock
BjÃ¸rn	Hansen	bjorn.hansen@yahoo.no	Rock

8: Return all the track names that have a song length longer than the average song length.

```sql
SELECT name,milliseconds
FROM track
WHERE milliseconds > (
    SELECT AVG(milliseconds) AS avg_track_length
    FROM track )
ORDER BY milliseconds DESC;
```

name	milliseconds
How Many More Times	711836
Advance Romance	677694
Sleeping Village	644571
You Shook Me(2)	619467
Talkin' 'Bout Women Obviously	589531

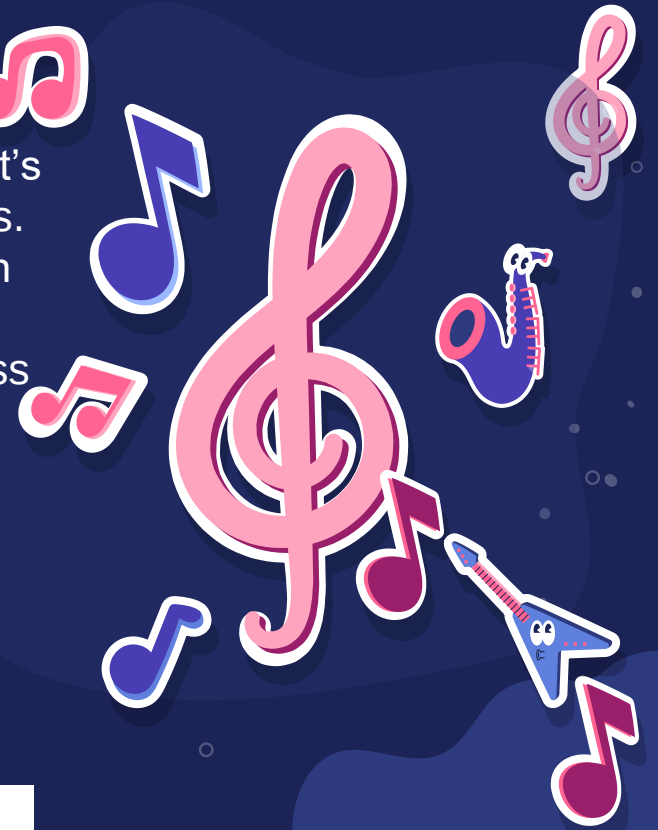
9: Find out the most popular music Genre for each country. We determine the most popular genre as the Genre with the highest amount of purchases.

```sql
WITH popular_genre AS
(
    SELECT COUNT(invoice_line.quantity) AS purchases, customer.country, genre.name, genre.genre_id,
    ROW_NUMBER() OVER(PARTITION BY customer.country ORDER BY COUNT(invoice_line.quantity) DESC) AS RowNo
    FROM invoice_line
    JOIN invoice ON invoice.invoice_id = invoice_line.invoice_id
    JOIN customer ON customer.customer_id = invoice.customer_id
    JOIN track ON track.track_id = invoice_line.track_id
    JOIN genre ON genre.genre_id = track.genre_id
    GROUP BY 2,3,4
    ORDER BY 2 ASC, 1 DESC
)
SELECT * FROM popular_genre WHERE RowNo <= 1
```

purchases	country	name	genre_id	RowNo
1	Argentina	Rock	1	1
18	Australia	Rock	1	1
6	Austria	Rock	1	1
5	Belgium	Rock	1	1
26	Brazil	Rock	1	1

Thanks!

Working on this project was really cool! We dug into pizza hut's sales using SQL, cleaned it up and found some neat insights. We learned a lot and can't wait to use our newfound skills in future projects. Thanks to everyone involved for a great experience. If you have any questions or would like to discuss this project further, feel free to reach out to me.



Connect with me:

https://github.com/siumahameed

www.linkedin.com/in/sium11

www.facebook.com/siumahameedbhuyan.11