

Music Store Analysis

MYSQL PROJECT

Objective

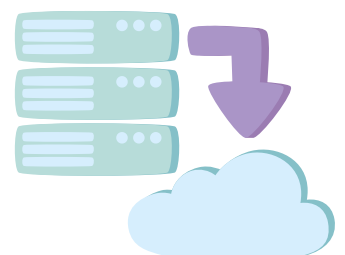
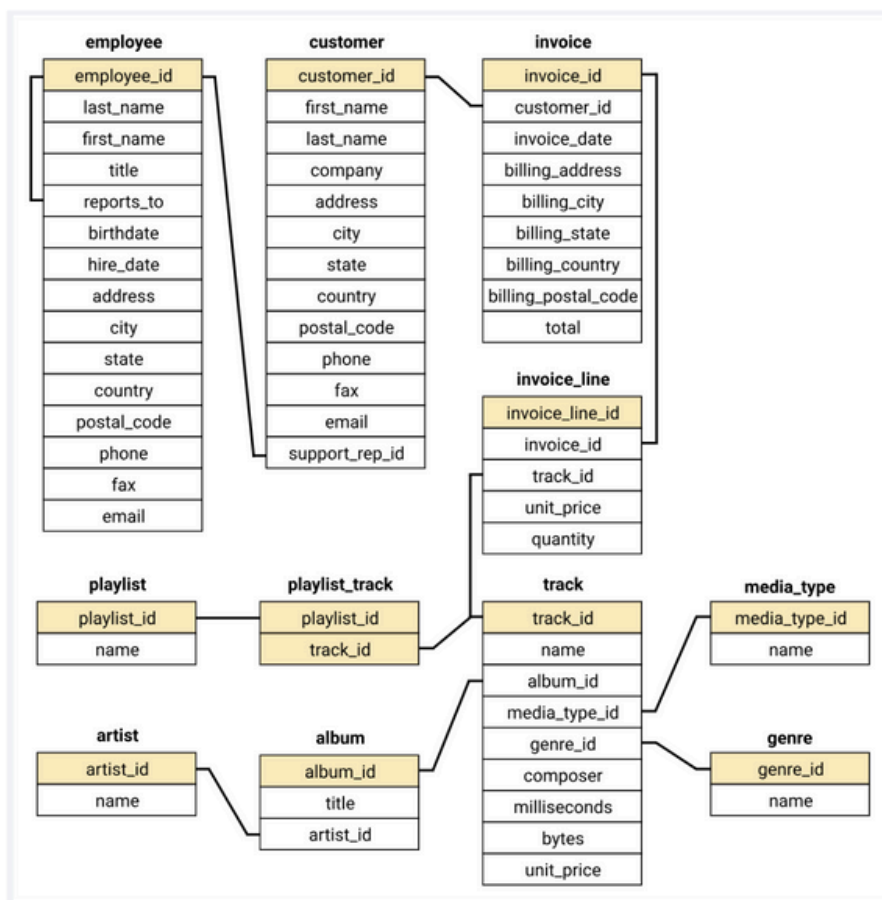
- The primary objective of the music store is to achieve sustainable business growth while addressing existing challenges.
- We need to examine dataset with SQL and help- the music store understand its business growth by answering simple questions.

Question Modes

- Easy - Queries include : SELECT, GROUP BY, ORDER BY, LIMIT, DESC.
- Moderate - Queries Include : JOINS, GROUP BY, ORDER BY, LIMIT.
- Advance - Queries Include : CTE (COMMON TABLE EXPRESSION).



Music Database



BY KARAN CHASKAR

Music Store Analysis

LEVEL - BASIC

Q1 Who is the senior most employee based on job title?

- Input :

```
select title, concat(first_name, ' ', last_name) as employee_name,  
levels, email, city, country from employee  
order by levels desc  
limit 1;
```

- Output :

	title	employee_name	levels	email	city	country
▶	Senior General Manager	Mohan Madan	L7	madan.mohan@chinookcorp.com	Edmonton	Canada

Q2 Which country have the most invoices

- Input :

```
select count(*) as invoice_counts, billing_country from invoice  
group by billing_country  
order by invoice_counts desc;
```

- Output :

	invoice_counts	billing_country
▶	131	USA
	76	Canada
	61	Brazil
	50	France
	41	Germany
	30	Czech Republic
	29	Portugal
	28	United Kingdom
	21	India
	13	Ireland
	13	Chile
	11	Finland
	11	Spain
	10	Poland
	10	Denmark



Music Store Analysis

LEVEL - BASIC

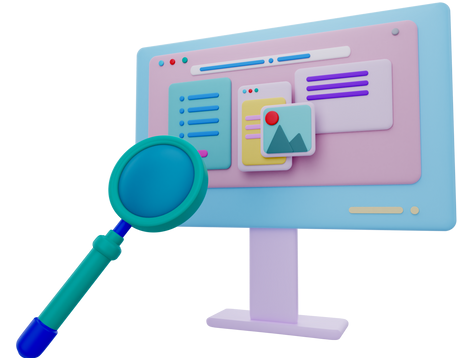
Q3 what are top 3 values of total invoices?

• Input :

```
select customer_id, total from invoice
order by total desc
limit 3;
```

• Output :

	customer_id	total
▶	42	23.759999999999998
	32	19.8
	3	19.8



Q4 Which city has the best customers? We would like to through a promotional Music Festival in city we made the most money

Write a query that returns one city that has the highest sum of invoice totals.

Return both the city name and sum of all invoice totals.

• Input :

```
select * from customer;
select sum(total) as invoice_total, billing_city from invoice
group by billing_city
order by invoice_total desc;
```

• Output :

	invoice_total	billing_city
▶	273.24000000000007	Prague
	169.29	Mountain View
	166.32	London
	158.4	Berlin
	151.47	Paris
	129.69	SÃo Paulo
	114.83999999999997	Dublin
	111.86999999999999	Delhi
	108.89999999999998	SÃo JosÃ dos Campos

BY KARAN CHASKAR

Music Store Analysis

LEVEL - MODERATE

**Q1 Write query to return email, first name, last name & Genre of Rock Music listeners.
Return your list by alphabetically by email starting with A.**

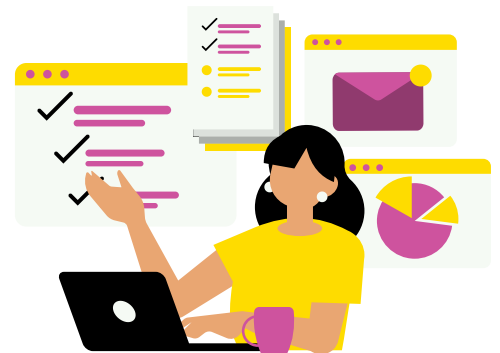
• Input :

```
select distinct c.email, concat(c.first_name, ' ', c.last_name) as customer_name
from customer as c
join invoice as i on c.customer_id = i.customer_id
join invoice_line as il on i.invoice_id = il.invoice_id
where track_id in(
select track_id from track as t
join genre as g on t.genre_id = g.genre_id
where g.name like 'Rock')
order by email;
```

• Output :

	email	customer_name
▶	aaronmitchell@yahoo.ca	Aaron Mitchell
	alero@uol.com.br	Alexandre Rocha
	astrid.gruber@apple.at	Astrid Gruber
	bjorn.hansen@yahoo.no	Björn Hansen
	camille.bernard@yahoo.fr	Camille Bernard
	daan_peeters@apple.be	Daan Peeters
	diego.gutierrez@yahoo.ar	Diego Gutiérrez
	dmiller@comcast.com	Dan Miller
	dominiquelefebvre@gmail.com	Dominique Lefebvre
	edfrancis@yahoo.ca	Edward Francis
	eduardo@woodstock.com.br	Eduardo Martins
	ellie.sullivan@shaw.ca	Ellie Sullivan
	emma_jones@hotmail.com	Emma Jones
	enrique_munoz@yahoo.es	Enrique Muñoz
	fernadaramos4@uol.com.br	Fernanda Ramos
	fharris@google.com	Frank Harris
	fralston@gmail.com	Frank Ralston
	frantisekw@jetbrains.com	František Wichterl...
	ftremblay@gmail.com	François Tremblay
	fzimmermann@yahoo.de	Fynn Zimmermann

Result 32 x



BY KARAN CHASKAR

Music Store Analysis

LEVEL - MODERATE

Q2 Lets invite the artists who have written most rock music in our dataset.

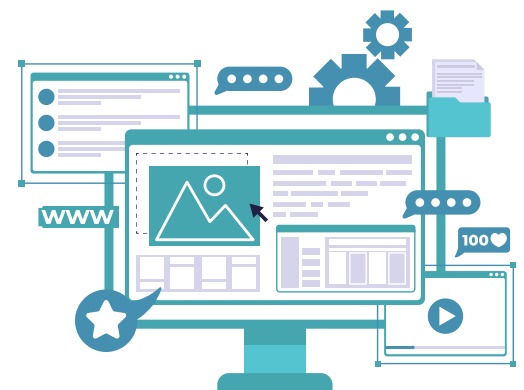
Write a query that returns Artist name and total track count of the top 10 rock bands.

• Input :

```
select a.name, count(t.track_id) as tracks
from artist as a
join album as al on a.artist_id = al.artist_id
join track as t on al.album_id = t.album_id
join genre as g on t.genre_id = g.genre_id
where g.name like 'Rock'
group by a.name
order by tracks desc
limit 10;
```

• Output :

	name	tracks
▶	AC/DC	18
	Aerosmith	15
	Audioslave	14
	Led Zeppelin	14
	Alanis Morissette	13
	Alice In Chains	12
	Frank Zappa & Captain Beefheart	9
	Accept	4



BY KARAN CHASKAR

Music Store Analysis

LEVEL - MODERATE

Q3 Return all the track names that have a song length longer than the average song length.

Return the name and Milliseconds for each track.

Order by the song length with the longest songs listed first.

• Input :

```
select name, milliseconds from track
where milliseconds > (
select avg(milliseconds) as avg_length from track)
order by milliseconds desc;
```

• Output :

	name	milliseconds
▶	How Many More Times	711836
	Advance Romance	677694
	Sleeping Village	644571
	You Shook Me(2)	619467
	Talkin' 'Bout Women Obviously	589531
	Stratus	582086
	No More Tears	555075
	The Alchemist	509413
	Wheels Of Confusion / The Straightener	494524
	Book Of Thel	494393
	You Oughta Know (Alternate)	491885
	Terra	482429
	Snoopy's search-Red baron	456071
	Sozinho (Hitmakers Classic Mix)	436636
	Master Of Puppets	436453
	Stone Crazy	433397
	Snowblind	420022
	Computadores Fazem Arte	404323
	Jerusalem	402390
	Dazed and Confused	401920
	The Winner Loses	392254
track 34 ×		



BY KARAN CHASKAR

Music Store Analysis

LEVEL - ADVANCE

Q1 Find how much amount spend by each customer on artists?

Write a query to return customer name, artist name and total spent.

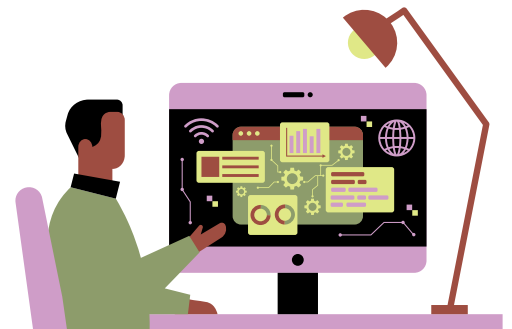
• Input :

```
with best_selling_artist as (  
  select a.artist_id, a.name as artist_name, sum(il.unit_price * il.quantity) as total_sales  
  from invoice_line as il  
  join track as t on t.track_id = il.track_id  
  join album as al on al.album_id = t.album_id  
  join artist as a on a.artist_id = al.artist_id  
  group by 1, 2  
  order by 3 desc  
  limit 1)  
select c.customer_id, concat(c.first_name, ' ', c.last_name) as customer, bsa.artist_name,  
       round(sum(il.unit_price * il.quantity), 2) as amount_spent  
from invoice as i  
join customer as c on c.customer_id = i.customer_id  
join invoice_line as il on il.invoice_id = i.invoice_id  
join track as t on t.track_id = il.track_id  
join album as al on al.album_id = t.album_id  
join best_selling_artist as bsa on bsa.artist_id = al.artist_id  
group by 1, 2, 3  
order by 4 desc;
```

• Output :

	customer_id	customer	artist_name	amount_spent
▶	54	Steve Murray	AC/DC	17.82
	53	Phil Hughes	AC/DC	10.89
	21	Kathy Chase	AC/DC	10.89
	49	Stanisław Wójcik	AC/DC	9.9
	1	Luís Gonçalves	AC/DC	7.92
	24	Frank Ralston	AC/DC	7.92
	31	Martha Silk	AC/DC	3.96
	16	Frank Harris	AC/DC	2.97
	42	Wyatt Girard	AC/DC	2.97
	6	Helena Holm	AC/DC	2.97

Result 35 ✕



BY KARAN CHASKAR

Music Store Analysis

LEVEL - ADVANCE

Q2 We want to find out most popular Music Genre for each country.

We determine the most popular genre as the genre with the highest amount of purchase.

Write a query that returns each country along with the top Genre.

For countries where the maximum number of purchases is shared return all genres

• Input :

```
with popular_genre as (  
  select count(il.quantity) as purchase, c.country, g.name, g.genre_id,  
  row_number() over(partition by c.country order by count(il.quantity) desc) as row_no  
  from invoice_line as il  
  join invoice as i on i.invoice_id = il.invoice_id  
  join customer as c on c.customer_id = i.customer_id  
  join track as t on t.track_id = il.track_id  
  join genre as g on g.genre_id = t.genre_id  
  group by 2,3,4  
  order by c.country asc, purchase desc  
)  
select * from popular_genre where row_no <= 1;
```

• Output :



	purchase	country	name	genre_id	row_no
▶	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
	57	Canada	Rock	1	1
	7	Chile	Rock	1	1
	14	Czech Republic	Rock	1	1
	6	Denmark	Rock	1	1
	6	Finland	Rock	1	1
	26	France	Rock	1	1
	28	Germany	Rock	1	1
	4	Hungary	Rock	1	1

Result 36 ✕

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Music Store Analysis

LEVEL - ADVANCE

Q3 Write a query that determines the customer that has spent on music for each country.

Write a query that returns a country along with the top customer and how much they spent.

For countries the top amount is shared, provide all customers who spent this amount

• Input :

```
with customer_with_country as (  
  select c.customer_id, concat(c.first_name, ' ', c.last_name) as customer_name, billing_country,  
  round(sum(total), 2) as total_spending,  
  row_number() over(partition by billing_country order by sum(total) desc) as rowno  
  from invoice as i  
  join customer as c on c.customer_id = i.customer_id  
  group by 1, 2, 3  
  order by 3 asc, 4 desc)  
select * from customer_with_country where rowno <= 1;
```

• Output :

	customer_id	customer_name	billing_country	total_spending	rowno
▶	56	Diego Guti��rrez	Argentina	39.6	1
	55	Mark Taylor	Australia	81.18	1
	7	Astrid Gruber	Austria	69.3	1
	8	Daan Peeters	Belgium	60.39	1
	1	Lu��s Gon���alves	Brazil	108.9	1
	3	Fran���ois Tremblay	Canada	99.99	1
	57	Luis Rojas	Chile	97.02	1
	5	Franti��ek Wichterlov��i	Czech Republic	144.54	1
	9	Kara Nielsen	Denmark	37.62	1
	44	Terhi H���m���inen	Finland	79.2	1
	42	Wyatt Girard	France	99.99	1
	37	Fynn Zimmermann	Germany	94.05	1
	45	Ladislav Kov��ics	Hungary	78.21	1
	58	Manoj Pareek	India	111.87	1
	46	Hugh O'Reilly	Ireland	114.84	1
	47	Lucas Mancini	Italy	50.49	1
	48	Johannes Van der Berg	Netherlands	65.34	1
	4	Bi��rn Hansen	Norway	72.27	1

Result 37 x



BY KARAN CHASKAR

Music Store Analysis

MYSQL PROJECT

Project Resource

- CSV Files Dataset Link : <https://shorturl.at/sEIUV>
- SQL Database Link : <https://bit.ly/3wYyp88>
- GitHub Project Link : <https://github.com/karna-chaskar/SQL-Projects/>

Profile Links

- LinkedIn Profile : <https://www.linkedin.com/in/karan-chaskar/>
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- Resume : <https://drive.google.com/file/d/>



THANK
YOU!

BY KARAN CHASKAR