**MUSIC STORE DATA ANALYSIS**

Q.1) who is senior most employee based on JOB title?

select first\_name, last\_name from employee

order by levels desc

Limit 1;

Q.2) Which country has the most invoices?

select count(\*) as inv\_count, billing\_country from invoice

group by billing\_country

order by inv\_count desc

limit 1;

Q.3) what are top 3 values of total invoices?

select \* from invoice

order by total desc

limit 3;

Q.4) Which city has the best customers? We would like to throw a promotional Music Festival in the city we made the most money. Write a query that returns one city that has the highest number of invoices & Write a query that returns one city that has the highest sum of invoice total. Return both the city name & sum of all invoice totals.

// one city that has the highest number of invoices //

select count(\*) as a, billing\_city from invoice

group by billing\_city

order by a desc

limit 1;

// one city that has the highest sum of invoice money//

select sum(total) as t, billing\_city from invoice

group by billing\_city

order by t desc

limit 1;

Q.5) Who is the best customer? The customer who has spend the most money will be declared the best customer. Write a query that returns a person who has spend the most money

select first\_name, last\_name, sum(b.total) as c from customer a

join invoice b

on a.customer\_id = b.customer\_id

group by a.customer\_id

order by c desc

limit 1

Q.6) Write query to return the email, first name, last name & genre of all Rock music listners. Return your list ordered alphabetically by email starting with A.

select distinct email, first\_name, Last\_name from customer a

join invoice b

on a.customer\_id = b.customer\_id

join invoice\_line c

on b.invoice\_id = c.invoice\_id

where track\_id in(

select track\_id from track d

join genre e on d.genre\_id = e.genre\_id

where e.name = 'Rock'

)

order by email

Q.7) Lets invite the artists who have written the most rock music in our dataset. Write a query that returns the artist name and total track count of the top 10 rock bands

select a.artist\_id, a.name, count(a.artist\_id) as Number\_of\_songs from artist a

join album b

on a.artist\_id = b.artist\_id

join track c

on b.album\_id = c.album\_id

join genre d

on c.genre\_id = d.genre\_id

where d.name = 'Rock'

group by a.artist\_id

order by Number\_of\_songs desc

limit 10;

Q.8) 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.

select name, milliseconds from track

where milliseconds > ( select avg(milliseconds) as avg\_song\_lenght

from track)

order by milliseconds desc;

Q.9) Find how much amount spent by each customer or artist? Write query to return customer name, artist name and total spend

with best\_selling\_artist as (

select a.artist\_id as Artist\_id, a.name as Artist\_name, sum(d.unit\_price \* d.quantity) as total\_sale

from artist a

join album b on a.artist\_id = b.artist\_id

join Track c on b.album\_id = c.album\_id

join invoice\_line d on c.track\_id = d.track\_id

group by 1

order by 3 desc

limit 1

)

select f.customer\_id, f.first\_name, f.Last\_name, k.artist\_name, sum(h.unit\_price \* h.quantity)

from customer f

join invoice g on f.customer\_id = g.customer\_id

join invoice\_line h on g.invoice\_id = h.invoice\_id

join track i on h.track\_id = i.track\_id

join album j on i.album\_id = j.album\_id

join best\_selling\_artist k on j.artist\_id = k.artist\_id

group by 1,2,3,4

order by 5 desc

Q.10) we want to find out most popular music genre for each country. We determine the most popular genre with the highest amount of purchases. 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.

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 ROW\_no

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

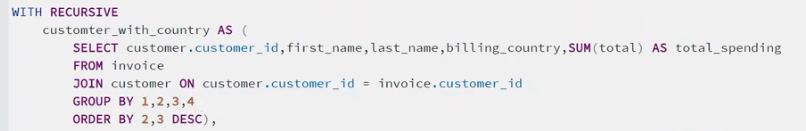
order by 2 asc, 1 desc

)

select \* from popular\_genre

where Row\_no <= 1

Q.11) Write a query that determines the customer that has spent the most on music for each country. Write a query that returns the country along with the top customer and how much they spent. For countries where the top amount spent is shared, provide all customers who spent this amount



With RECURSIVE

Customer\_with\_country as (

Select customer.customer\_id, first\_name, Last\_name, billing\_country, sum(total) as total\_spending

From invoice

Join customer on customer.customer\_id = invoice.customer\_id

Group by 1,2,3,4

Order by 2,3, DESC),

Country\_max\_spending as(

Select billing\_country, max(total\_spending) as max\_spending

From customer\_with\_country

Group by billing\_country)

Select cc.billing\_country, cc.total\_spending, cc.first\_name, cc.last\_name

From Customer\_with\_country cc

Join Country\_max\_spending ms

On cc.billing\_country = ms.billing\_country

Where cc.total\_spending = ms.max\_spending

Order by 1;

