**Music Store Data Analysis Project using PostGreSQL**

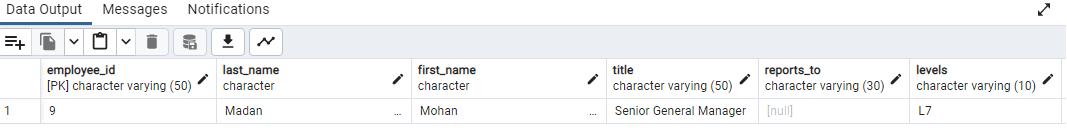
Tool : PostGreSql

--Senior employee based on level

Select \* from employee

Order by levels DESC

LIMIT 1;

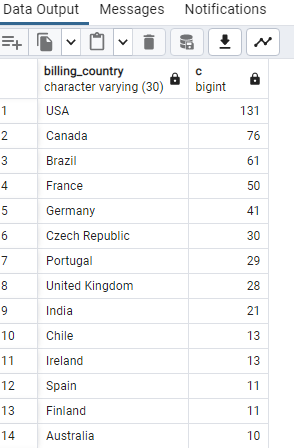


--which countries have the most invoices?

Select billing\_country, count(\*) as C from invoice

Group by bIlling\_country

order by C DESC;



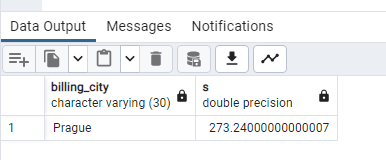
--City with best customers and hightest invoices Total.

Select billing\_city, sum(total) as s from invoice

group by billing\_city

order by s DESC

LIMIT 1;



--Best customer who spent the most money

select C.customer\_id, C.first\_name ,C.last\_name, sum(I.total) as Total\_Payment

from customer C

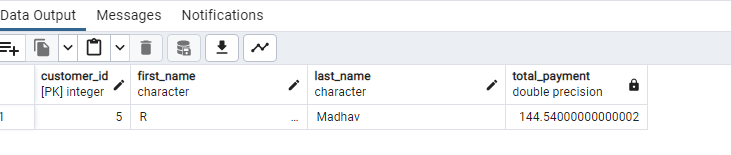
JOIN invoice I

ON C.customer\_id = I.customer\_id

Group by C.customer\_id

order by Total\_Payment DESC

LIMIT 1;



-- 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 \* from customer;

Select \* from genre;

Select \* from invoice\_line;

select \* from track;

Select \* from invoice;

Select DISTINCT email, first\_name, last\_name from customer C

JOIN invoice I ON C.customer\_id = I.customer\_id

JOIN invoice\_line ON invoice\_line.invoice\_id = I.invoice\_id

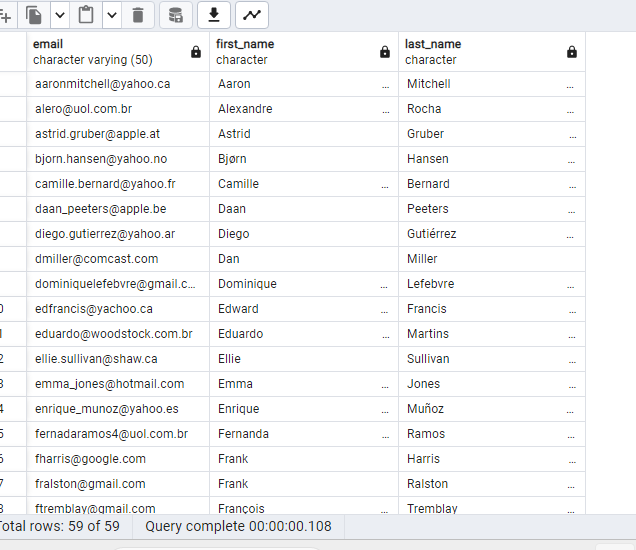
Where track\_id IN (select track\_id from track

Join genre on track.genre\_id = genre.genre\_id

where genre.name like 'Rock'

)

order by email;



-- Let's 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 \* from artist;

select \* from track;

select \* from genre;

Select \* from album;

Select \* from customer;

Select artist.artist\_id, artist.name, count(artist.artist\_id) from track

JOIN Album ON track.Album\_id = Album.Album\_id

JOIN genre ON genre.genre\_id = track.genre\_id

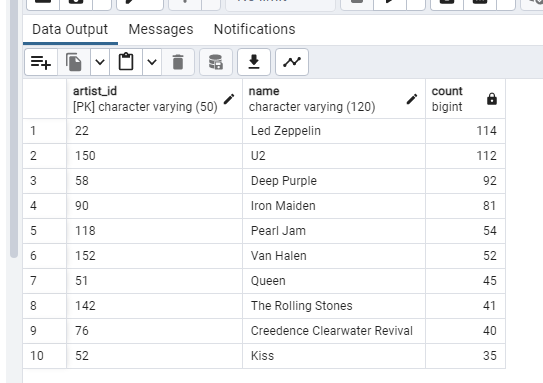
JOIN Artist on Artist.Artist\_id = Album.Artist\_id

Where genre.name LIKE 'Rock'

Group by artist.artist\_id

ORDER BY count(artist.artist\_id) DESC

LIMIT 10;



--Return all the track names that have a song length longer than the

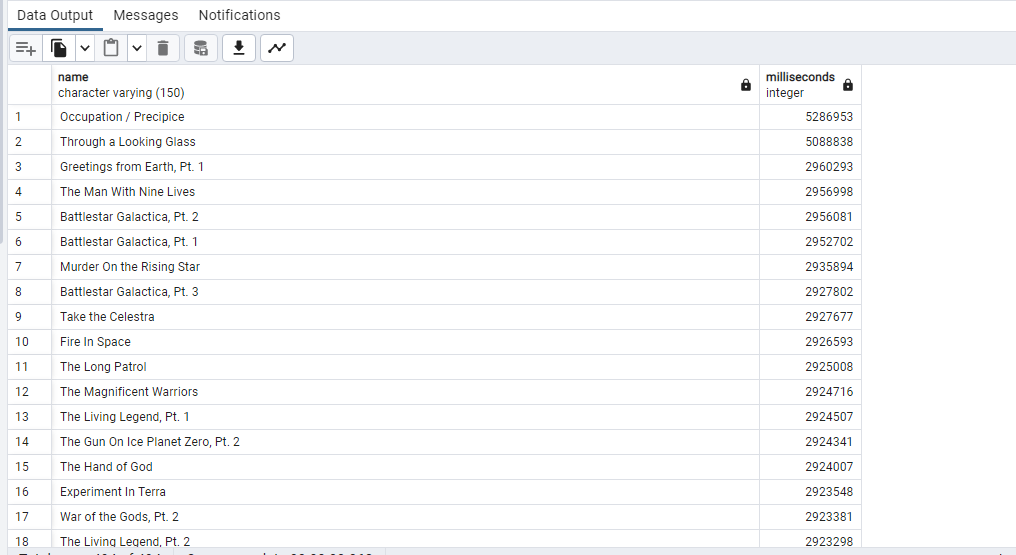
average song length. Return the Name and Milliseconds for each track.

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

Select track.name, milliseconds from track

where milliseconds > (Select avg(milliseconds) from track)

Order by Milliseconds DESC



--Find how much amount spent by each customer on artists?

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

With best\_Selling As (

Select artist.artist\_id, artist.name as artist\_name,

sum(invoice\_line.unit\_Price \* invoice\_line.quantity) as total\_Sales

from invoice\_line

JOIN track on track.track\_id = invoice\_line.track\_id

JOIN album on album.album\_id = track.album\_id

JOIN artist on artist.artist\_id = album.artist\_id

Group by 1

Order by 3 DESC

LIMIT 1

)

Select c.customer\_id, c.first\_name, c.last\_name, bs.artist\_name,

sum(il.unit\_price \* il.quantity) as sales

from invoice i

JOIN customer c on c.customer\_id = i.customer\_id

JOIN invoice\_line il on il.invoice\_id = i.invoice\_id

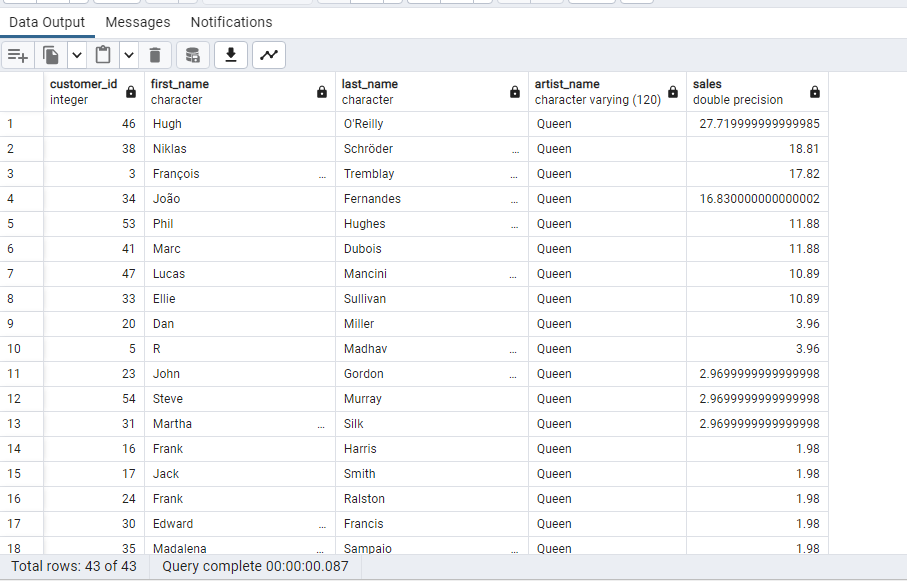
JOIN track t on t.track\_id = il.track\_id

JOIN album alb on alb.album\_id = t.album\_id

JOIN best\_selling bs on bs.artist\_id = alb.artist\_id

Group by 1,2,3,4

Order by 5 DESC



--We want to 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.

--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 most\_popular\_genre AS (

select count(invoice\_line.quantity) as purchase, 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

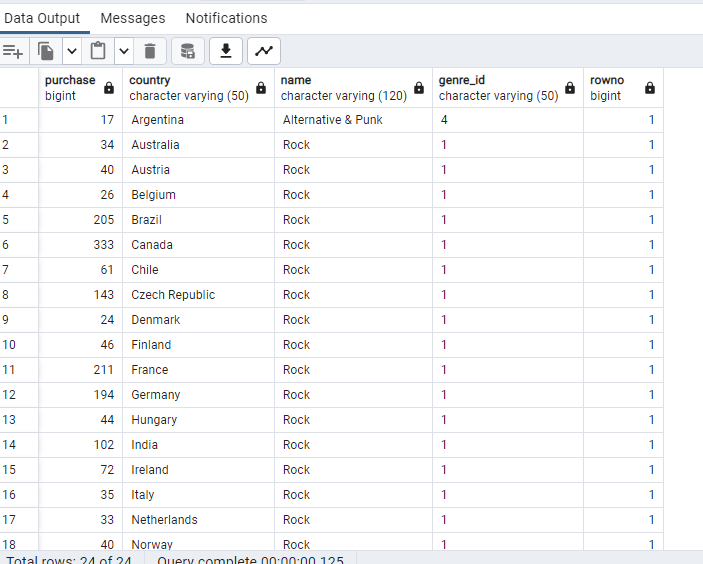
JOIN genre on genre.genre\_id = track.genre\_id

Group by 2,3,4

Order by 2 ASC, 1 DESC

)

select \* from most\_popular\_genre where Rowno <=1



/\*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 customer\_by\_country as (

select customer.customer\_id, customer.first\_name, customer.last\_name, billing\_country,

sum(total) as total\_spent, Row\_number()

over(Partition by billing\_country order by sum(total) DESC) as Rowno

from invoice

JOIN customer on customer.customer\_id = invoice.customer\_id

Group by 1,2,3,4

Order by 4 ASC, 5 DESC

)

Select \* from customer\_by\_country where rowno<=1

