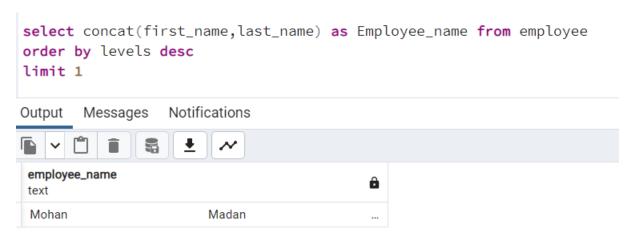
SQL PROJECT- MUSIC STORE DATA ANALYSIS

Question Set 1 - Easy

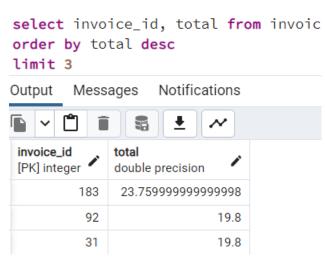
1. Who is the senior most employee based on job title?



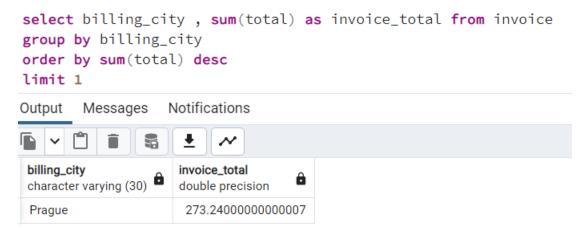
2. Which countries have the most Invoices?



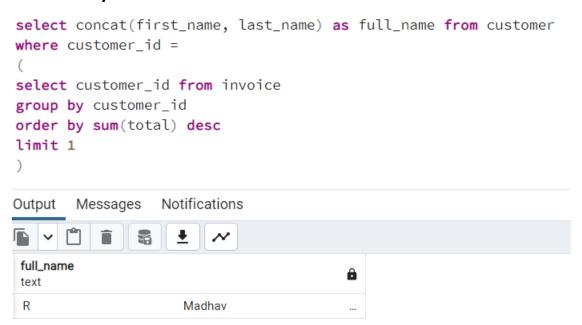
3. What are top 3 values of total invoice?



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 sum of invoice totals. Return both the city name & sum of all invoice totals?

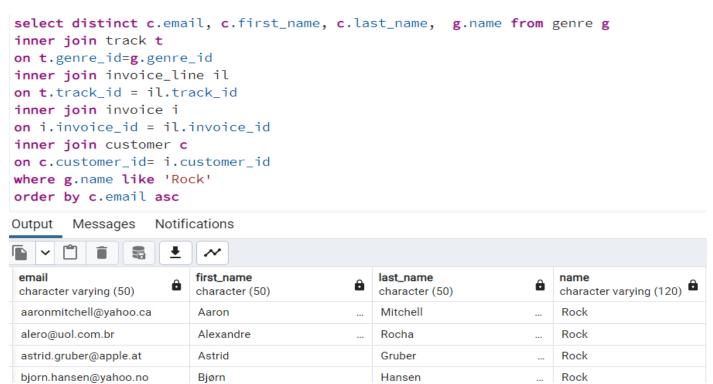


5. Who is the best customer? The customer who has spent the most money will be declared the best customer. Write a query that returns the person who has spent the most money?

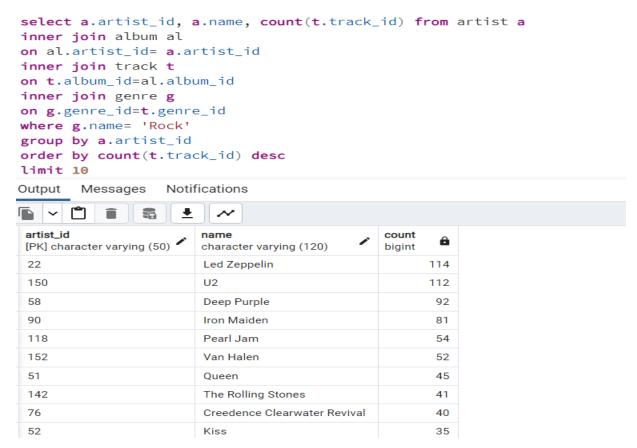


Question Set 2 – Moderate

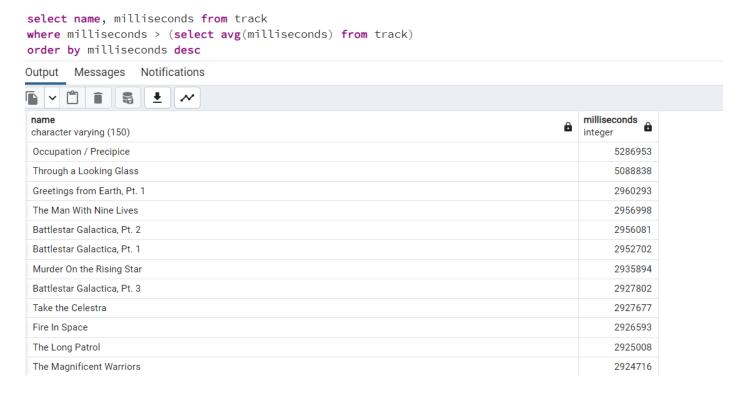
1. Write query to return the email, first name, last name, & Genre of all Rock Music listeners. Return your list ordered alphabetically by email starting with A



2. 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

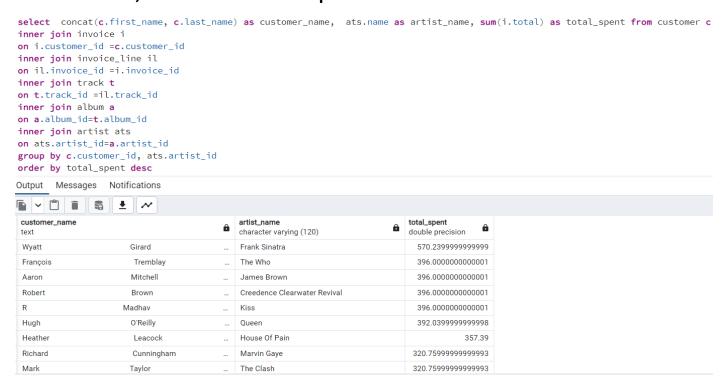


3. Return all the track names that have a song length longer than the average song length. Return the Name and Milliseconds for each track. Order by the song length with the longest songs listed first



Question Set 3 – Advance

1. Find how much amount spent by each customer on artists? Write a query to return customer name, artist name and total spent



The above gives the customer spend on different artist

```
with best_artist as (
select a.artist_id, a.name, sum(il.unit_price*il.quantity) from artist a
inner ioin album al
on al.artist_id = a.artist_id
inner join track t
on t.album_id = al.album_id
inner join invoice_line il
on il.track_id = t.track_id
group by a.artist_id
order by 3 desc
limit 1)
\textbf{select c.} c. \textbf{customer\_id ,} \textbf{concat} (\textbf{c.first\_name}, \textbf{c.last\_name}) \ \textbf{as} \ \textbf{customer\_name} \ \textbf{,} \ \textbf{ba.name} \ \textbf{as} \ \textbf{artist\_name}, \ \textbf{sum} (\textbf{il.unit\_price} \star \textbf{il.quantity})
inner join invoice i
on i.customer_id=c.customer_id
inner join invoice_line il
on il.invoice_id=i.invoice_id
inner join track t
on il.track_id=t.track_id
inner join album al
on t.album_id=al.album_id
inner join best_artist ba
on ba.artist_id=al.artist_id
group by 1,2,3
order by 4 desc
```

	customer_id integer	customer_name text		â	artist_name character varying (120)	sum double precision
1	46	Hugh	O'Reilly		Queen	27.71999999999985
2	38	Niklas	Schröder	***	Queen	18.81
3	3	François	Tremblay		Queen	17.82
4	34	João	Fernandes		Queen	16.8300000000000002
5	53	Phil	Hughes		Queen	11.88
6	41	Marc	Dubois		Queen	11.88
7	47	Lucas	Mancini		Queen	10.89
8	33	Ellie	Sullivan		Queen	10.89
9	20	Dan	Miller		Queen	3.96
10	5	R	Madhav		Queen	3.96
11	23	John	Gordon		Queen	2.969999999999998
12	54	Steve	Murray		Queen	2.969999999999998

This code gives you the amount spend by different customer on Queen (That has sold highest copies)

2. 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 cte as
(select g.name, i.billing_country as country, count(i.invoice_id),
row_number() over(partition by i.billing_country order by count(i.invoice_id) desc) as row_numbers
from invoice i
inner join invoice_line il
on il.invoice_id=i.invoice_id
inner join track t
on t.track_id=il.track_id
inner join genre g
on g.genre_id=t.genre_id
group by g.name, i.billing_country
order by country, 3 desc)
select name, country, count from cte where row_numbers<=1</pre>
order by count desc
        Messages Notifications
Output
name
                     country
                                         count
                     character varying (30)
                                                a
character varying (120)
                                         bigint
                     USA
 Rock
                                               561
 Rock
                     Canada
                                               333
                     France
 Rock
                                               211
                     Brazil
                                               205
 Rock
 Rock
                     Germany
                                               194
 Rock
                     United Kingdom
                                               166
                     Czech Republic
                                               143
 Rock
```

3. 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 cte as
(select c.customer_id as customer_id, i.billing_country as country, sum(total) as total_spent,
row_number() over(partition by i.billing_country order by sum(total) desc) as row_no, concat(c.first_name,c.last_name) as name
from customer c
inner join invoice i
on i.customer_id=c.customer_id
group by 1,2
order by 3 desc)
select customer_id, name, country, total_spent from cte where row_no<=1</pre>
Output
        Messages
8
 customer_id
              name
                                                               country
                                                                                   total_spent
                                                               character varying (30)
              text
                                                                                   double precision
 integer
              R
                                                                                    144.540000000000002
                                     Madhay
                                                               Czech Republic
          46
              Hugh
                                      O'Reilly
                                                               Ireland
                                                                                    114.83999999999997
                                                               India
           1
                                                               Brazil
                                                                                    108.8999999999998
              Luís
                                     Goncalves
          34
              João
                                      Fernandes
                                                               Portugal
                                                                                    102.960000000000001
          42 Wyatt
                                      Girard
                                                                                                99.99
              François
                                       Tremblay
                                                                                                99.99
                                                               Canada
          50
              Enrique
                                                                                                98.01
                                      Muñoz
                                                               Spain
          53
              Phil
                                     Hughes
                                                               United Kingdom
                                                                                                98.01
```