SQL Project

ON MUSIC STORE DATA

I did analysis on music data store using SQL Queries

Details:

We have a database named as music store data ,this contains 11 tables having information form that i have calculated the most Invoices, total invoice, best customers, artists who have written the most rock music, avg song length.

The senior most employee based on job title

```sql
select * from employee
order by levels desc
limit 1;
```

employee_id	last_name	first_name	title	reports_to	levels	birthdate
1	Adams	Andrew	General Manager	9	L6	18-02-1962 00:00

Countries have the most Invoices

```sql
select count(*),billing_country
from invoice
group by billing_country;
```

count(*)	billing_country
131	USA
76	Canada
50	France
10	Poland
21	India
41	Germany

Return both the city name & sum of all invoice totals

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

invoice_total	billing_city
273.24000000000007	Prague
169.29	Mountain View
166.32	London
158.4	Berlin
151.47	Paris
129.69	SÃ£o Paulo

TOP 3 VALUES OF TOTAL INVOICE

```sql
select * from invoice
order by total desc
limit 3;
```

invoice_id	customer_id	invoice_date	billing_address	billing_city	billing_state
183	42	2018-02-09 00:00:00	9, Place Louis Barthou	Bordeaux	None
92	32	2017-07-02 00:00:00	696 Osborne Street	Winnipeg	MB
526	5	2020-06-08 00:00:00	Klanova 9/506	Prague	None

Return your list ordered alphabetically by email starting with A

```sql
SELECT DISTINCT email,first_name, last_name
FROM customer
JOIN invoice ON customer.customer_id = invoice.customer_id
JOIN invoice_line ON invoice.invoice_id = invoice_line.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;
```

email	first_name	last_name
aaronmitchell@yahoo.ca	Aaron	Mitchell
alero@uol.com.br	Alexandre	Rocha
astrid.gruber@apple.at	Astrid	Gruber
bjorn.hansen@yahoo.no	BjÃ¸rn	Hansen
camille.bernard@yahoo.fr	Camille	Bernard
daan_peeters@apple.be	Daan	Peeters
diego.gutierrez@yahoo.ar	Diego	GutiÃ©rrez

Return the Name and Milliseconds for each track. Order by the song length with the longest songs listed first

```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
Stratus	582086
No More Tears	555075

Returns each country along with the top Genre. For countries where the maximum number of purchases is shared return all Genres

```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
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