Welcome To Music Store Sales

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

```sql
SELECT title, last_name, first_name
FROM employee
ORDER BY levels DESC
LIMIT 1
```

title	last_name	first_name
General Manager	Adams	Andrew

Result Grid | Filter Rows:

Q2: Which countries have the most Invoices?

```sql
SELECT COUNT(*) AS c, billing_country
FROM invoice
GROUP BY billing_country
ORDER BY c DESC
```

Result Grid	Filter Rows:

c	billing_country
131	USA
76	Canada
61	Brazil
50	France
41	Germany

Q3: What are top 3 values of total invoice?

```sql
SELECT total
FROM invoice
ORDER BY total DESC
limit 3
```

Result Grid	
	total
▶	23.76
	19.8
	19.8

Q4: 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?

```sql
SELECT billing_city,SUM(total) AS InvoiceTotal
FROM invoice
GROUP BY billing_city
ORDER BY InvoiceTotal DESC
LIMIT 1;
```

billing_city	InvoiceTotal
Prague	273.24000000000007

Q5: 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?

```sql
SELECT customer.customer_id, customer.first_name, customer.last_name, SUM(invoice.total) AS total
FROM customer
JOIN invoice ON customer.customer_id = invoice.customer_id
GROUP BY customer.customer_id, customer.first_name, customer.last_name
ORDER BY total DESC
LIMIT 1;
```

customer_id	first_name	last_name	total
5	FrantiÅiek	WichterlovÃi	144.54000000000002

Q6: 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 DISTINCT c.email, c.first_name, c.last_name, g.name AS genre
FROM customer c
JOIN invoice i ON c.customer_id = i.customer_id
JOIN invoice_line il ON i.invoice_id = il.invoice_id
JOIN track t ON il.track_id = t.track_id
JOIN genre g ON t.genre_id = g.genre_id
WHERE g.name LIKE 'Rock'
ORDER BY c.email ASC;
```

	email	first_name	last_name	genre
▶	aaronmitchell@yahoo.ca	Aaron	Mitchell	Rock
	alero@uol.com.br	Alexandre	Rocha	Rock
	astrid.gruber@apple.at	Astrid	Gruber	Rock
	bjorn.hansen@yahoo.no	BjÃ_rn	Hansen	Rock
	camille.bernard@yahoo.fr	Camille	Bernard	Rock

Result Grid | Filter Rows: | Export: | Wra

Q7: 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?

```sql
SELECT artist.artist_id, artist.name, COUNT(track.track_id) AS number_of_songs
FROM track
JOIN album ON album.album_id = track.album_id
JOIN artist ON artist.artist_id = album.artist_id
JOIN genre ON genre.genre_id = track.genre_id
WHERE genre.name = 'Rock'
GROUP BY artist.artist_id, artist.name
ORDER BY number_of_songs DESC
LIMIT 10;
```

Result Grid | Filter Rows: | Export:

artist_id	name	number_of_songs
1	AC/DC	18
3	Aerosmith	15
8	Audioslave	14
22	Led Zeppelin	14
4	Alanis Morissette	13

Q8: 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) FROM track
)
ORDER BY milliseconds DESC;
```

name	milliseconds
How Many More Times	711836
Advance Romance	Advance Romance 94
Sleeping Village	644571
You Shook Me(2)	619467
Talkin' 'Bout Women Obviously	589531

Q9: 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?

```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
```

Result Grid	Filter Rows:		Export:	V

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

Q10: 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?

```sql
WITH Customter_with_country AS (
        SELECT customer.customer_id,first_name,last_name,billing_country,SUM(total) AS total_spending,
        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 Customter_with_country WHERE RowNo <= 1
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

customer_id	first_name	last_name	billing_country	total_spending	RowNo
56	Diego	GutiÃ©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	LuÃ-s	GonÃ§alves	Brazil	108.89999999999999	1