

Music Store Data Analysis

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

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

	first_name character	last_name character	title character varying (50)	levels character varying (10)
1	Mohan	Madan	Senior General Manager	L7

Q2: Which countries have the most invoices?

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

	billing_country character varying (30)	c bigint
1	USA	131
2	Canada	76
3	Brazil	61
4	France	50
5	Germany	41

Q3: What are top 3 values of total invoice?

```
SELECT invoice_id, total
FROM invoice
ORDER BY total DESC
LIMIT 3;
```

	invoice_id [PK] integer	total double precision
1	183	23.759999999999998
2	92	19.8
3	31	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.

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

	billing_city character varying (30) 🔒	invoice_total double precision 🔒
1	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.

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

	customer_id [PK] integer ✎	first_name character ✎	last_name character ✎	invoice_total double precision 🔒
1	5	R	...	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 email, first_name, last_name, genre.name
FROM customer
JOIN invoice ON invoice.customer_id = customer.customer_id
JOIN invoice_line ON invoice_line.invoice_id = invoice.invoice_id
JOIN track ON track.track_id = invoice_line.track_id
JOIN genre ON genre.genre_id = track.genre_id
WHERE genre.name = 'Rock'
ORDER BY email;
```

	email character varying (50) 🔒	first_name character 🔒	last_name character 🔒	name character varying (120) 🔒
1	aaronmitchell@yahoo.ca	Aaron	Mitchell	Rock
2	alero@uol.com.br	Alexandre	Rocha	Rock
3	astrid.gruber@apple.at	Astrid	Gruber	Rock
4	bjorn.hansen@yahoo.no	Bjørn	Hansen	Rock
5	camille.bernard@yahoo.fr	Camille	Bernard	Rock

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.

```
SELECT artist.artist_id, artist.name, COUNT(artist.artist_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 LIKE 'Rock'
GROUP BY artist.artist_id
ORDER BY number_of_songs DESC
LIMIT 10;
```

	artist_id [PK] character varying (50) ✎	name character varying (120) ✎	number_of_songs bigint 🔒
1	22	Led Zeppelin	114
2	150	U2	112
3	58	Deep Purple	92
4	90	Iron Maiden	81
5	118	Pearl Jam	54

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 character varying (150) 🔒	milliseconds integer 🔒
1	Occupation / Precipice	5286953
2	Through a Looking Glass	5088838
3	Greetings from Earth, Pt. 1	2960293
4	The Man With Nine Lives	2956998
5	Battlestar Galactica, Pt. 2	2956081

