MUSIC PLAYLIST

Introduction

This project aims to manage a music database that organizes and retrieves information about artists, albums, playlists, tracks, and invoices.The schema is designed to facilitate the querying of music data efficiently, supporting various operations such as inserting, updating, and retrieving data using SQL.

Questions

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

Q.2. Which countries have the most Invoices?

Q.3. Find albums by artist Queen?

Q.4. Get a list of albums and their corresponding artist names.

Q.5. What are top 3 values of total invoice?

Q.6. 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.

Q.7. 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.

Q.8. 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.

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

- Query

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

- Output

title character varying (50)	last_name character (50)	first_name character (50)
Senior General Manager	Madan	Mohan

Q.2. Which countries have the most Invoices?

- Query

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

- Output

	no_of_invoices bigint	billing_country character varying (30)
1	131	USA
2	76	Canada
3	61	Brazil
4	50	France
5	41	Germany
6	30	Czech Republic
7	29	Portugal
8	28	United Kingdom
9	21	India
10	13	Chile
11	13	Ireland
12	11	Finland
13	11	Spain
14	10	Hungary

Q.3. Find albums by artist Queen?

- Query

```
SELECT * FROM album
WHERE artist_id =
(SELECT artist_id
FROM artist
WHERE name ='Queen');
```

- Output

	album_id [PK] character varying (50)	title character varying (120)	artist_id character varying (30)
1	36	Greatest Hits II	51
2	185	Greatest Hits I	51
3	186	News Of The World	51

Q.4. Get a list of albums and their corresponding artist names.

- Query

```
SELECT a.title, ar.name AS artist_name
FROM album a
INNER JOIN artist ar
ON a.artist_id = ar.artist_id;
```

- Output

	title character varying (120)	artist_name character varying (120)
1	For Those About To Rock We Salute You	AC/DC
2	Balls to the Wall	Accept
3	Restless and Wild	Accept
4	Let There Be Rock	AC/DC
5	Big Ones	Aerosmith
6	Jagged Little Pill	Alanis Morissette
7	Facelift	Alice In Chains
8	Warner 25 Anos	Antônio Carlos Jobim
9	Plays Metallica By Four Cellos	Apocalyptica
10	Audioslave	Audioslave
11	Out Of Exile	Audioslave
12	BackBeat Soundtrack	BackBeat
13	The Best Of Billy Cobham	Billy Cobham
14	Alcohol Fueled Brewtality Live! [Disc 1]	Black Label Society
15	Alcohol Fueled Brewtality Live! [Disc 2]	Black Label Society
16	Black Sabbath	Black Sabbath

Q.5. What are top 3 values of total invoice?

- Query

```
SELECT total
FROM invoice
ORDER BY total DESC;
```

- Output

	total double precision
1	23.759999999999998
2	19.8
3	19.8
4	19.8
5	19.8
6	18.81
7	17.82
8	17.82

Q.6. 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?

- **Query**

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

- **Output**

	billing_city character varying (30)	total_invoice double precision
1	Prague	273.24000000000007

Q.7. 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.

- **Query**

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

- **Output**

	customer_id [PK] integer	first_name character (50)	last_name character (50)	total_spending double precision
1	5	R ...	Madhav	144.54

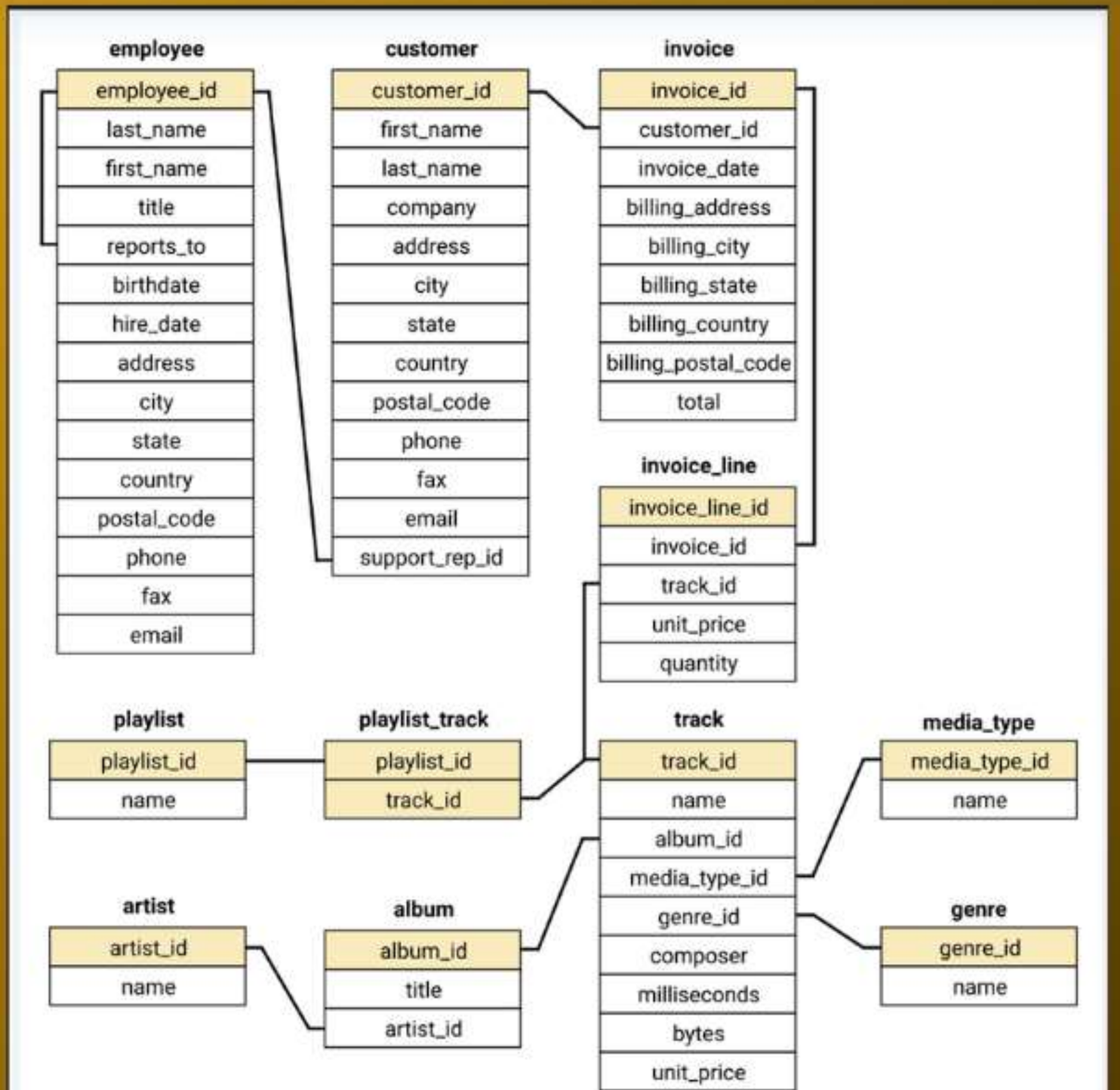
Q.8. Write a query that returns the Artist name and total track count of the top 10 rock bands.

- Query

```
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;
```

- Output

	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
6	152	Van Halen	52
7	51	Queen	45
8	142	The Rolling Stones	41
9	76	Creedence Clearwater Revival	40
10	52	Kiss	35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THANK YOU!