

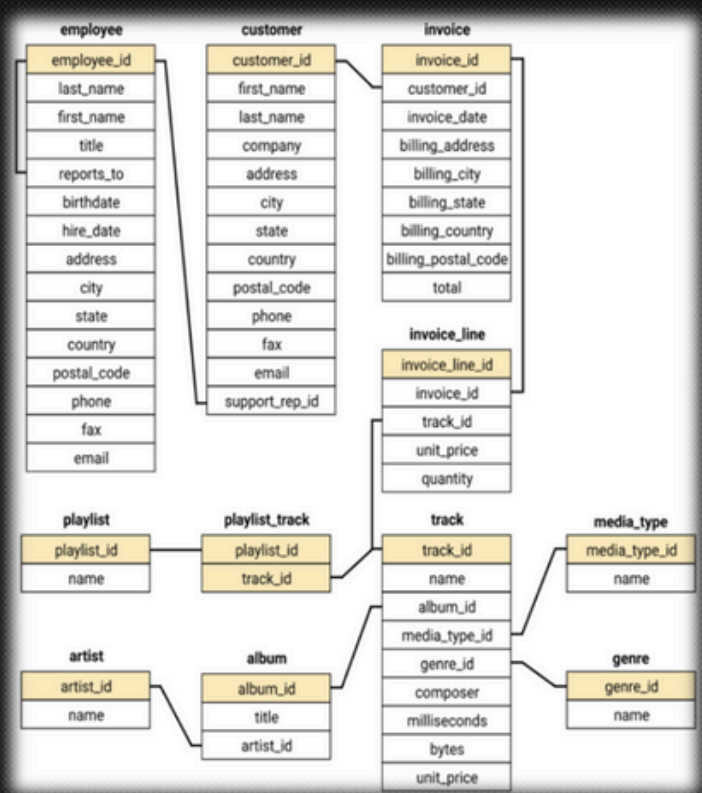
MUSIC STORE DATA ANALYSIS IN SQL

- You are hired as a data analyst at a music store, let's call it "Spotify". You're given access to a database with information about customers, singers, and more.
- As you explore connections between the data, your manager shares exciting news: the company plans to launch a new product! They need insights from the data to guide their decision-making.
- Your task is to analyse the database and provide answers to your manager's problem statements

Problem Statements

1. We want to assign an senior employee to lead that project. Who is the senior most employee based on job title?
2. Which county has most number of Invoices?
3. What is value of top 3 invoices ?
4. We would like to throw a promotional Music Festival in the city we made the most money. Which city has the best customers?
5. Who is the best customer? The customer who has spent the most money will be declared the best customer.
6. Details of customers who listens Rock music.
7. Let's invite the artists who have written the most rock music in our dataset.
8. We want to find out the most popular music Genre for each country.
9. We want to give gifts to top customer so Determine which customer has spent the most on music for each country.

Database Schema:



Solution 1 :

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

Solution 2 :

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

Solution 3 :

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

Solution 4 :

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

Solution 5 :

```
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;
```

Solution 6 :

```
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;
```

Solution 7 :

```
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;
```

Solution 8 :

```
WITH popular_genre AS
(
  SELECT COUNT(invoice_line.quantity) AS purchases,
  customer.country, genre.name as 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
```


Solution 9 :

```
WITH Customter_with_country AS (  
    SELECT  
customer.customer_id,first_name,last_name,billing_country,SUM(  
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  
order by total_spending desc
```