MUSIC STORE ANALYSIS

Using SQL

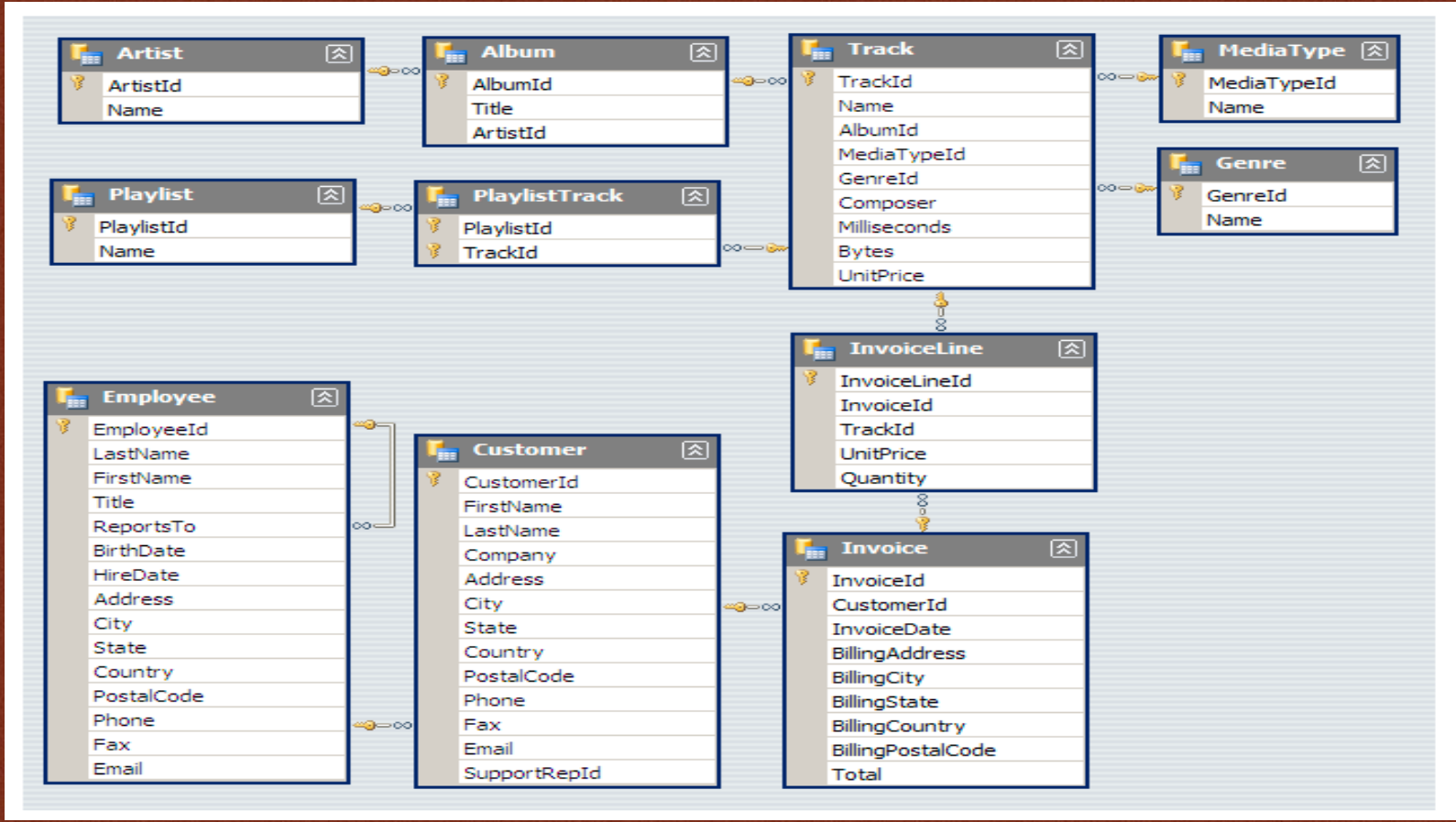
Project Description

This project aims to analyze sales data from a music store to identify key trends and insights. The focus areas include determining the most popular artists, songs, genres, and countries for music purchases. By leveraging SQL queries to interrogate the database, the project seeks to provide actionable insights that can help in strategic decision-making and improving business performance.

Queries

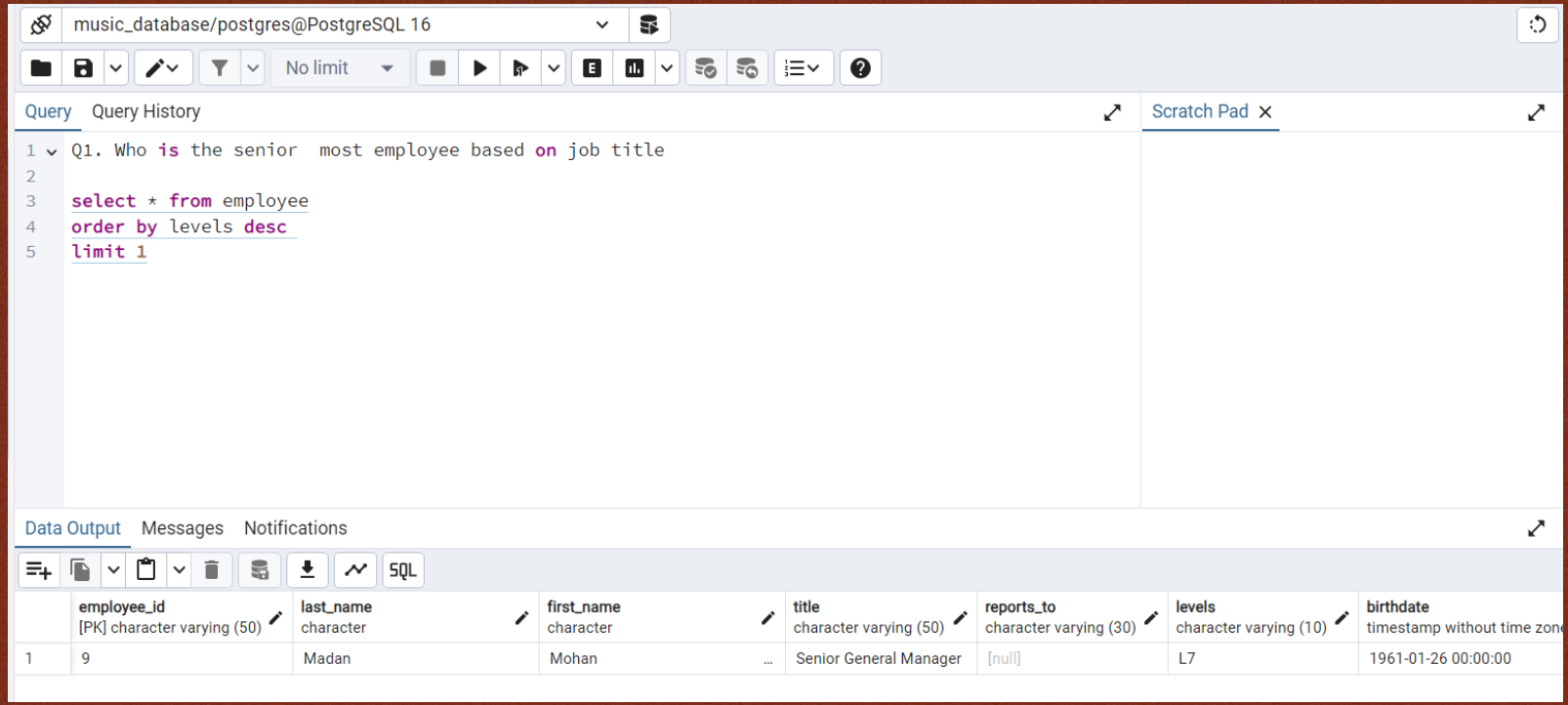
1. Who is the senior most employee based on job title?
2. Which countries have the most Invoices?
3. What are top 3 values of total invoice?
4. Which city has the best customers? We would like to throw a promotional Music Festival in the city we made the most money. Write a query that returns one city that has the highest sum of invoice totals. Return both the city name & sum of all invoice totals.
5. 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.
6. 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.
7. 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.
8. 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.
9. List top 10 most popular artists?
10. List top 5 most popular songs?
11. What are the most popular countries for music purchase?

Schema


Artist
ArtistId
Name
Album
AlbumId
Title
ArtistId
Track
TrackId
Name
AlbumId
MediaTypeId
GenreId
Composer
Milliseconds
Bytes
UnitPrice
MediaType
MediaTypeId
Name
Genre
GenreId
Name
Playlist
PlaylistId
Name
PlaylistTrack
PlaylistId
TrackId
InvoiceLine
InvoiceLineId
InvoiceId
TrackId
UnitPrice
Quantity
Employee
EmployeeId
LastName
FirstName
Title
ReportsTo
BirthDate
HireDate
Address
City
State
Country
PostalCode
Phone
Fax
Email
Customer
CustomerId
FirstName
LastName
Company
Address
City
State
Country
PostalCode
Phone
Fax
Email
SupportRepId
Invoice
InvoiceId
CustomerId
InvoiceDate
BillingAddress
BillingCity
BillingState
BillingCountry
BillingPostalCode
Total

List Of Tables

Who is the senior most employee based on job title?



Which countries have the most Invoices?

Query | Query History

```
1  Q2. Which country have most invoices?
2
3  select count(*) as s , billing_country
4  from invoice
5  group by billing_country
6  order by s desc;
7
8
```

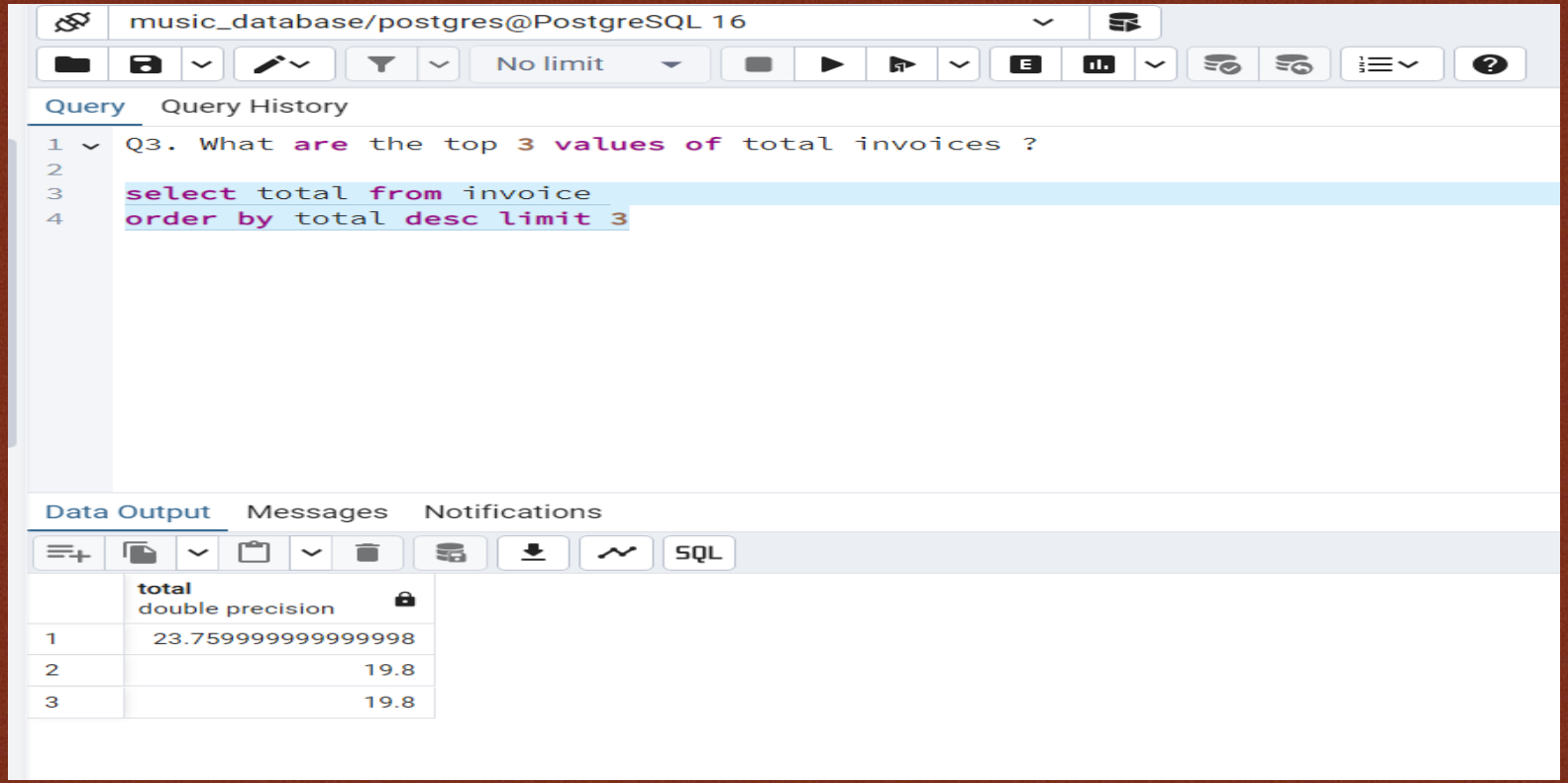
Data Output | Messages | Notifications

SQL

	s 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

Total rows: 24 of 24 Query complete 00:00:00.090

What are top 3 values of total invoice?



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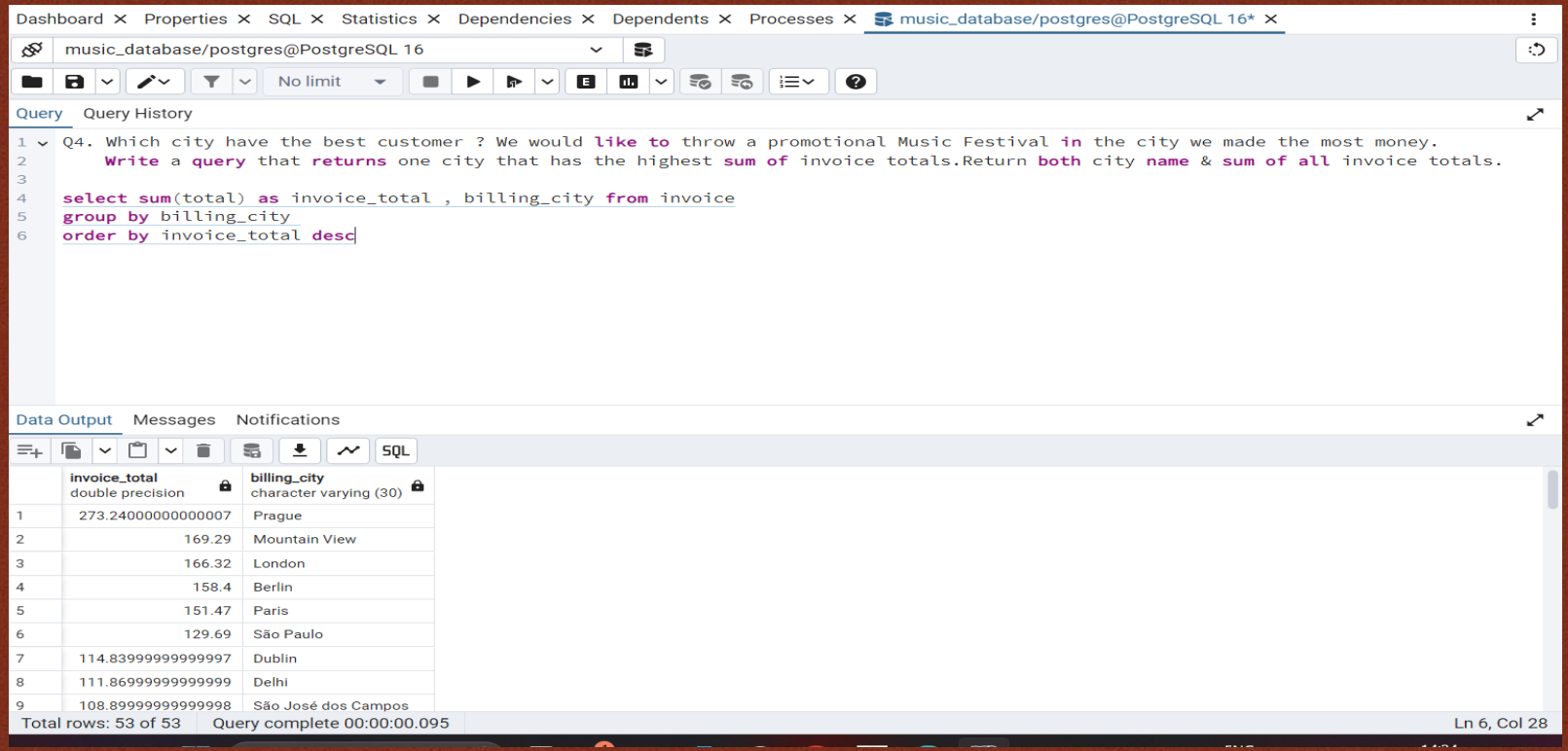

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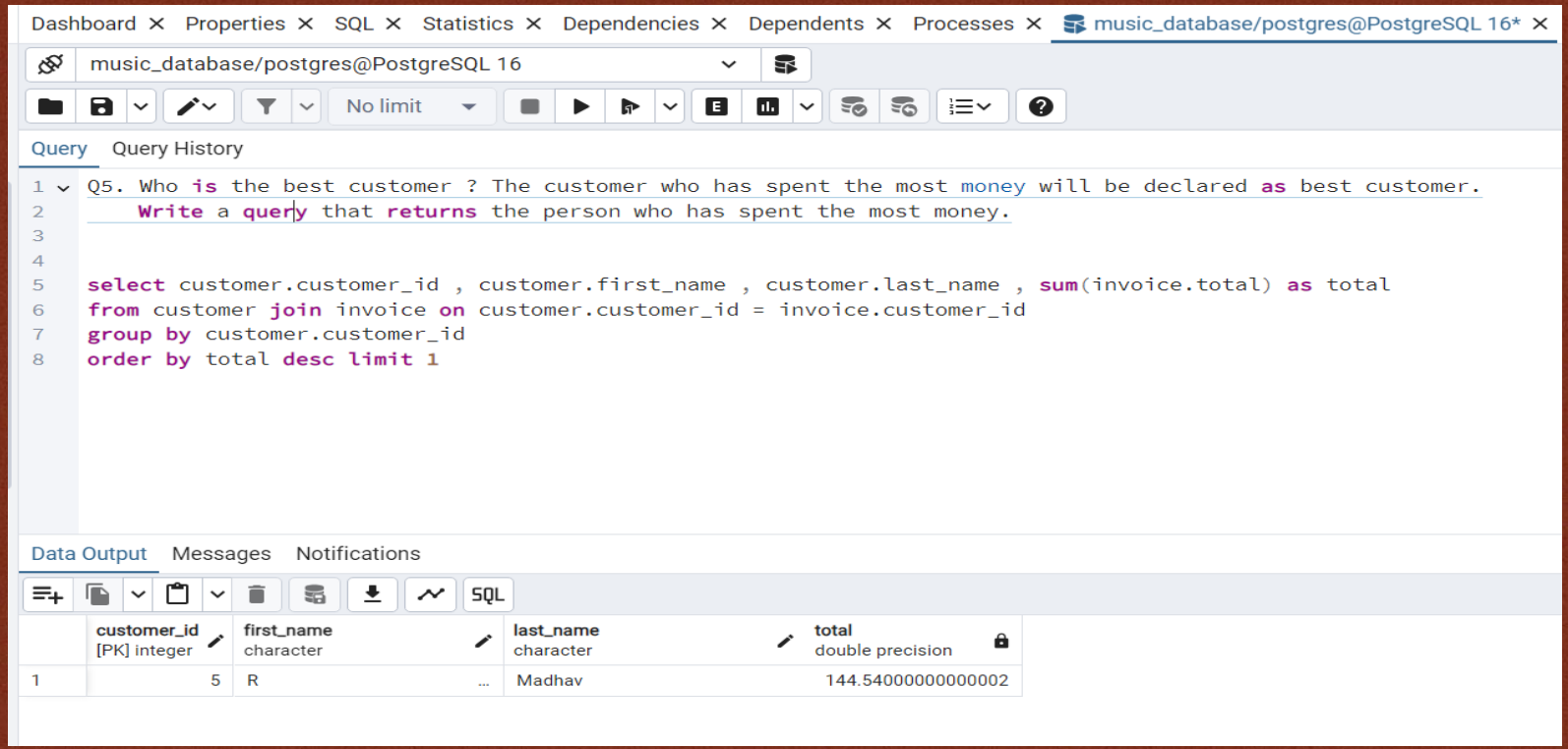
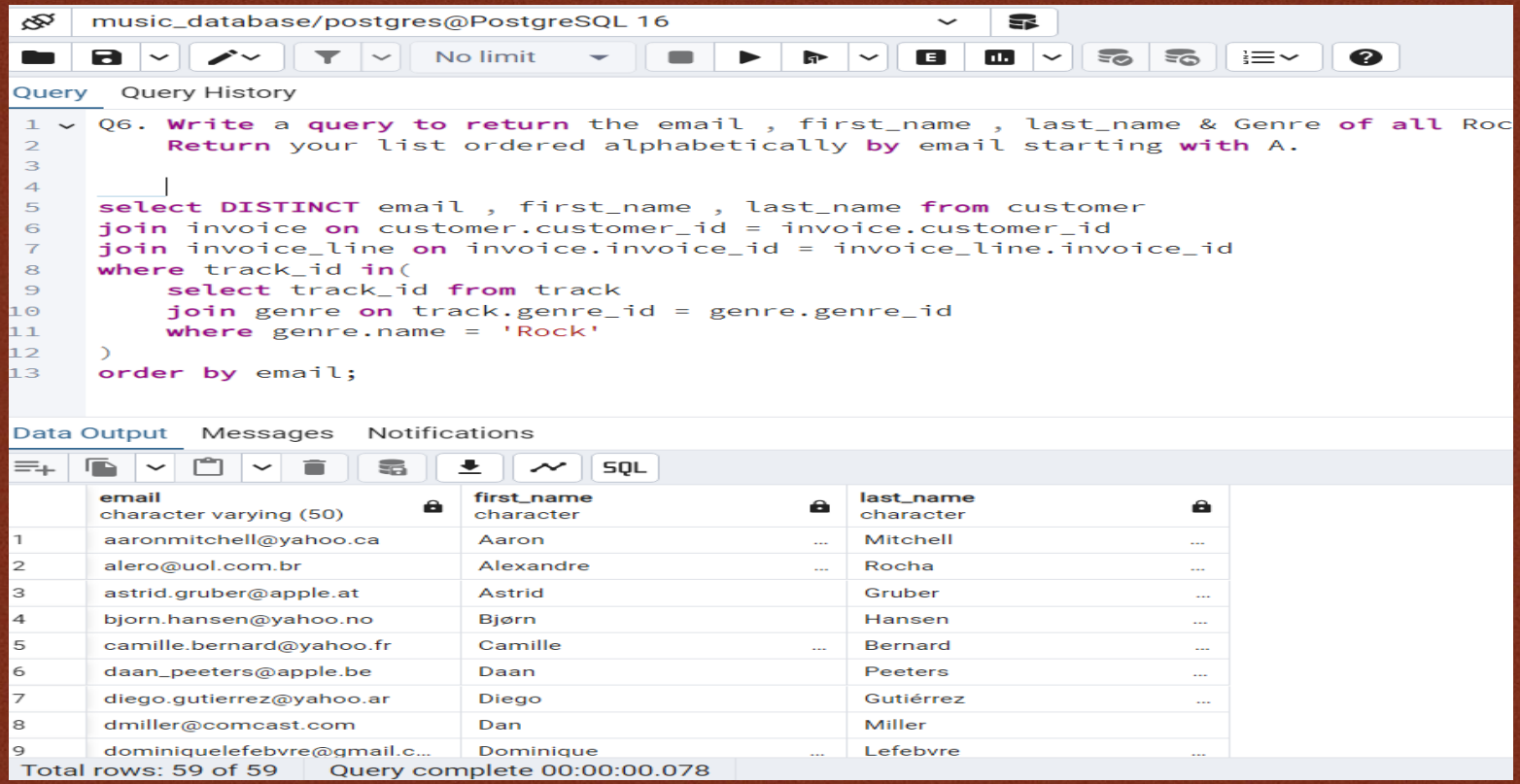
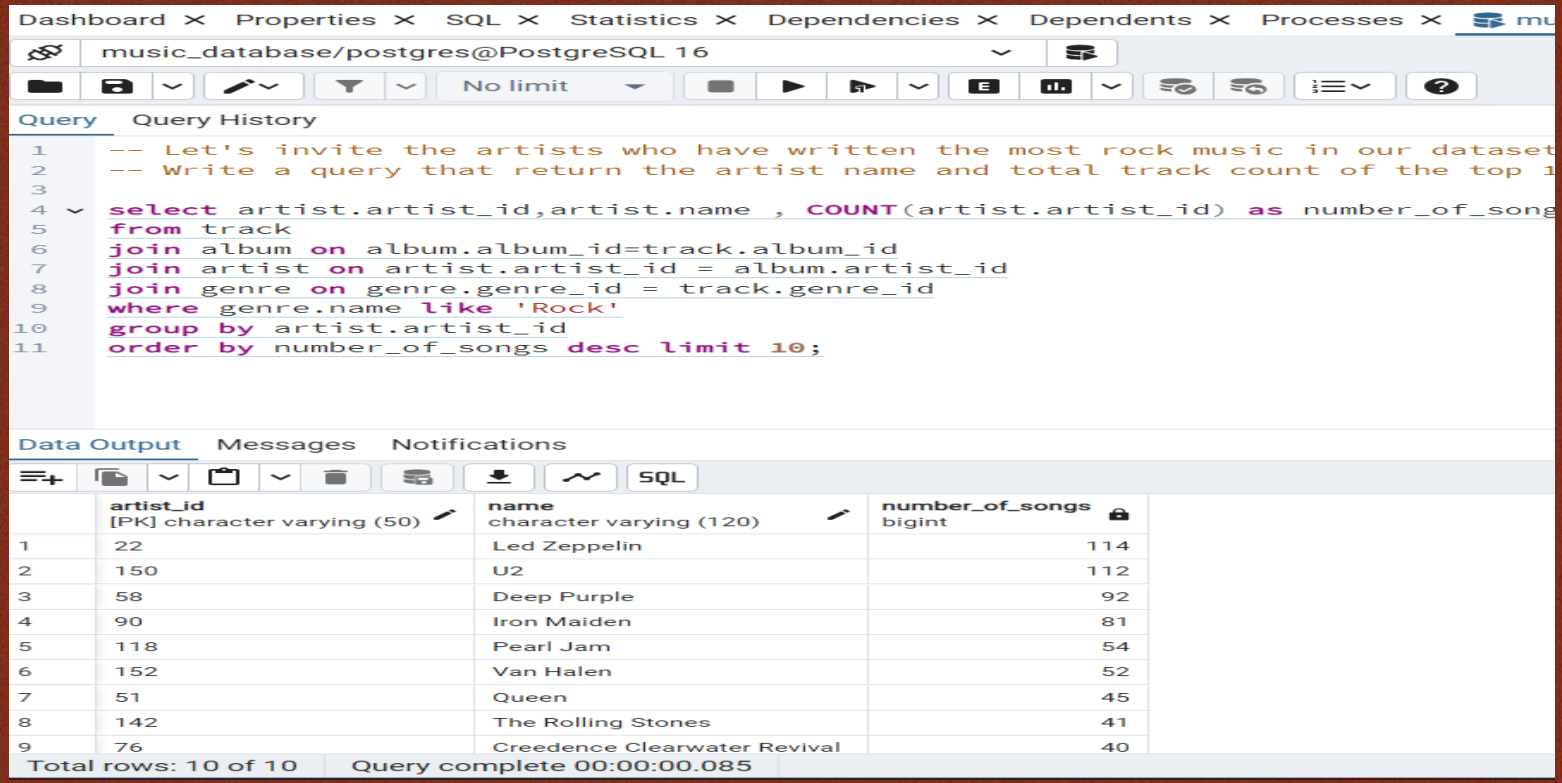


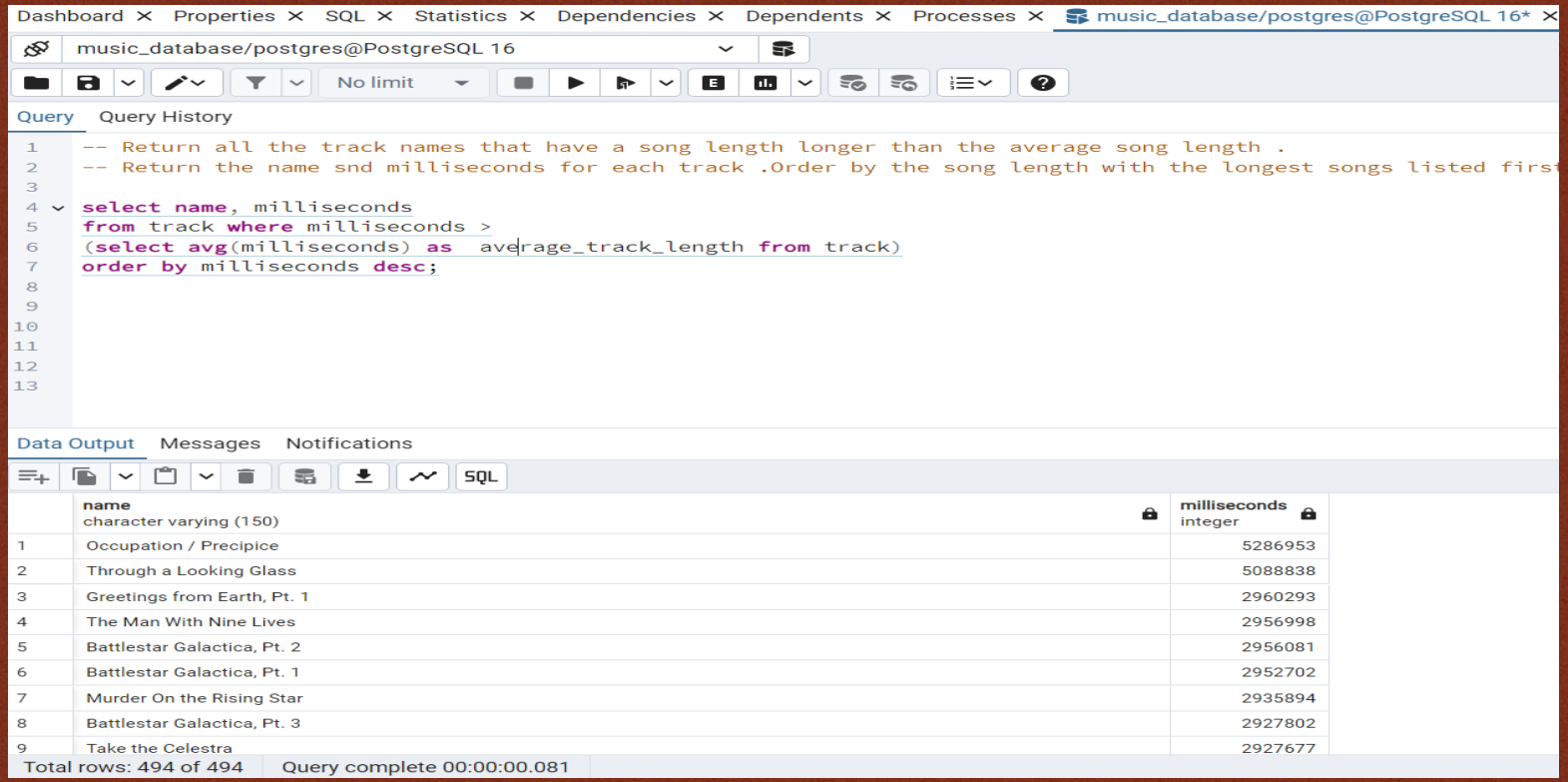
Write query to return the email, first name, last name, & Genre of all Rock Music listeners. Return your list ordered alphabetically by email starting with 'A'.



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.



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.



List top 10 most popular artists?

music_database/postgres@PostgreSQL 16

No limit

Query | Query History

```sql
-- List top 10 most popular artists?

SELECT COUNT(invoice_line.quantity) AS purchases, artist.name AS artist_name
FROM invoice_line
JOIN track ON track.track_id = invoice_line.track_id
JOIN album ON album.album_id = track.album_id
JOIN artist ON artist.artist_id = album.artist_id
GROUP BY artist.name
ORDER BY purchases DESC
LIMIT 10;
```

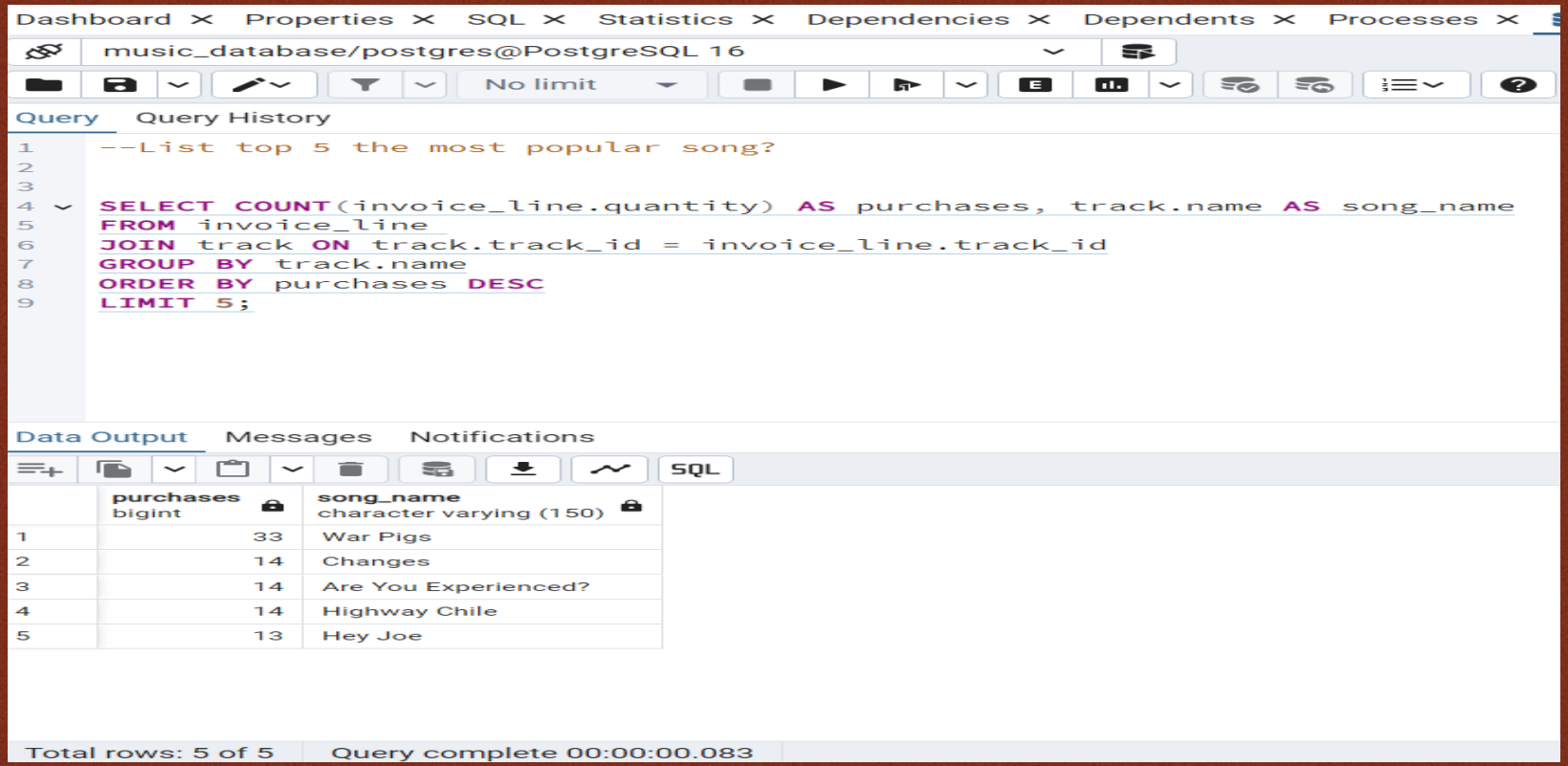
Data Output | Messages | Notifications

SQL

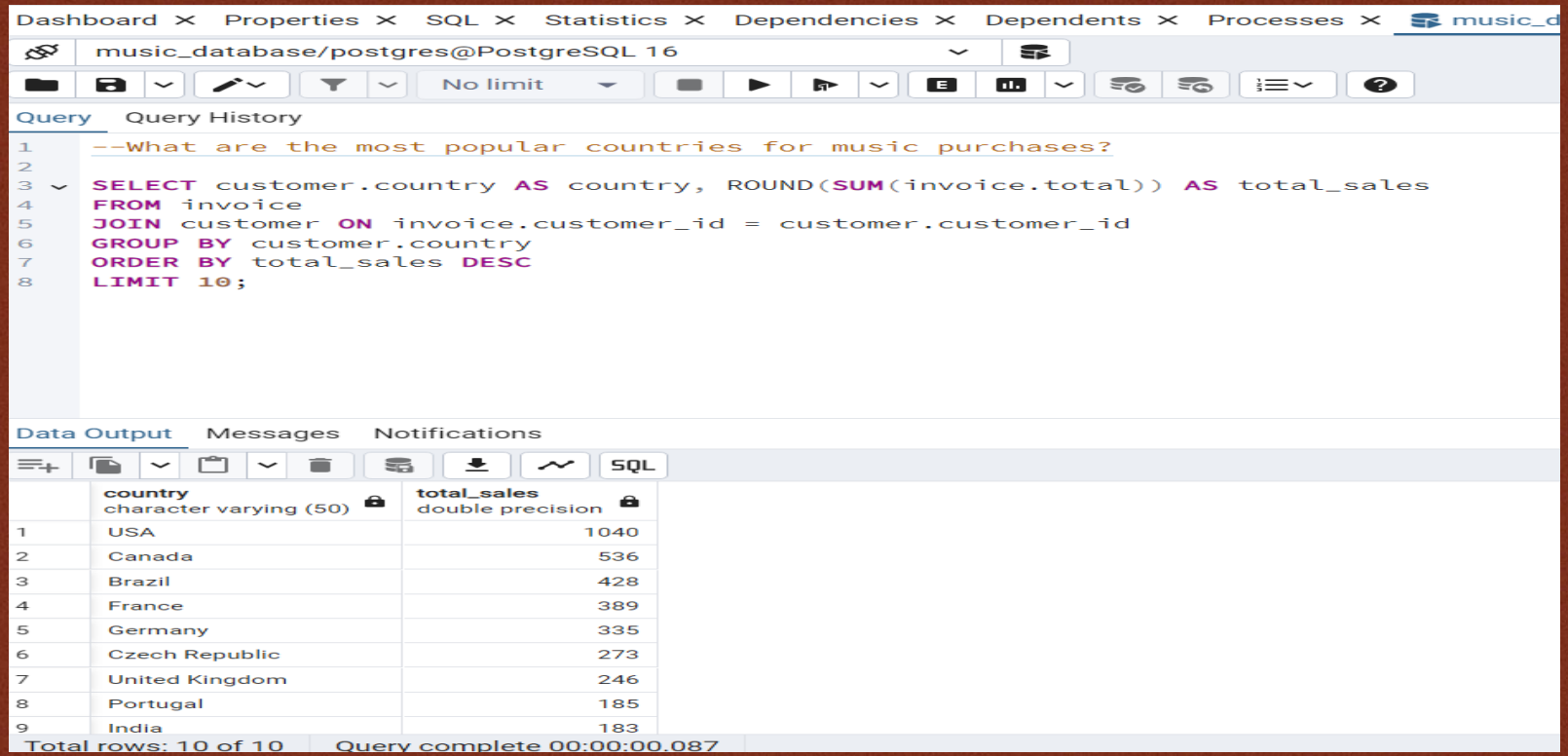
	purchases bigint	artist_name character varying (120)
1	192	Queen
2	187	Jimi Hendrix
3	130	Nirvana
4	130	Red Hot Chili Peppers
5	129	Pearl Jam
6	124	Guns N' Roses
7	124	AC/DC
8	121	Foo Fighters
9	117	The Rolling Stones

Total rows: 10 of 10 | Query complete 00:00:00.197

List top 5 most popular songs?



What are the most popular countries for music purchase?



Insights of the Project

1. Senior Most Employee: Madan Mohan (Senior General Manager)
2. Top Country for Invoices: USA (131 invoices)
3. Top Invoice Total: $23.76 (Invoice 183, France)
4. Best Customer City: Prague ($273.24 total sales)
5. Best Customer: František Wichterlová ($144.54 total spend)
6. Top Rock Artist: Led Zeppelin (114 tracks)
7. Longest Track: "Occupation / Precipice" (5286953 ms)
8. Most Popular Artist: Queen (192 purchases)
9. Most Popular Song: "War Pigs" (33 purchases)
10. Most Popular Countries for Purchases: USA (1051 purchases), Canada (541 purchases)
11. Rock Music Listeners: Targeted list includes customers' emails, first and last names for marketing purposes.


Thank
You