**Music sales**

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

select \* from employee

order by levels desc

limit 1

A close up of a screen

Description automatically generated

**Q2. Which countries have the most Invoices?**

Select count(\*) as c, billing\_country

from invoice

group by billing\_country

order by c desc



**Q3. What are the 3 values of total invoice?**

select total from invoice order by total desc

limit 3

**A screenshot of a computer

Description automatically generated**

**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 name & sum of invoice totals.**

select sum(total) as invoice , billing\_city from invoice

group by billing\_city

order by invoice desc

A screenshot of a computer

Description automatically generated

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, 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

order by total desc

limit 1

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Description automatically generated

**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

from customer

join invoice on customer.customer\_id = invoice.customer\_id

join invoice\_line on invoice.customer\_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

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Description automatically generated

**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 = 'Rock'

group by artist.artist\_id

order by number\_of\_songs Desc

limit 10

A screenshot of a computer

Description automatically generated

**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

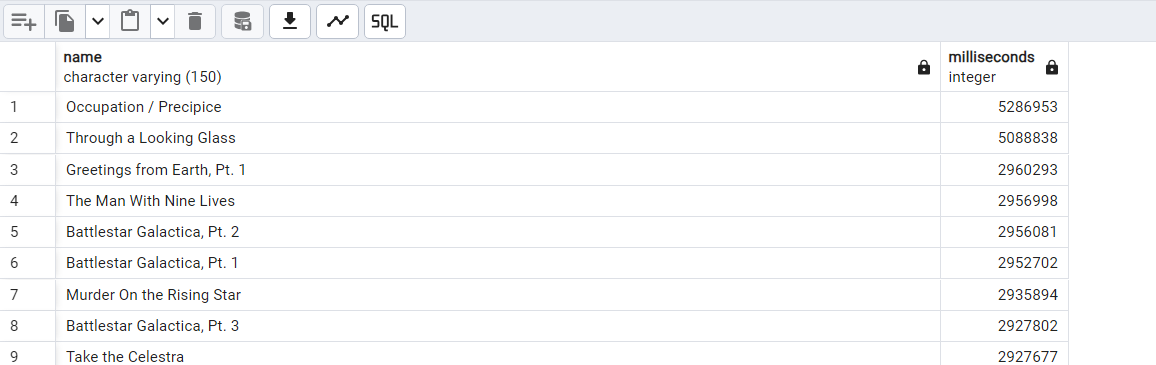
where milliseconds > (

select avg (milliseconds) as avg\_track\_length

from track

)

order by milliseconds desc



Q1: Find how much amount spent by each customer on artists? Write a query to return customer name, artist name and total spent

with best\_artist as (

select artist.artist\_id as artist\_id, artist.name as artist\_name,

sum (invoice\_line.unit\_price\* invoice\_line.quantity) as total\_cost

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.artist\_id

order by total\_cost desc

limit 1

)

select customer.customer\_id, last\_name, first\_name, best\_artist.artist\_name,

sum(invoice\_line.unit\_price \* invoice\_line.quantity) as amount\_spent

from invoice

join customer on customer.customer\_id = invoice.customer\_id

join invoice\_line on invoice.invoice\_id = invoice\_line.invoice\_id

join track on track.track\_id = invoice\_line.track\_id

join album on album.album\_id = track.album\_id

join best\_artist on best\_artist.artist\_id = album.artist\_id

group by 1,2,3,4

order by amount\_spent desc

A screenshot of a computer

Description automatically generated

Q2: 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.

with genre\_table as (

select genre.genre\_id, genre.name, count(invoice\_line.quantity) as purchase, customer.country, row\_number() over(partition by customer.country order by count (invoice\_line.quantity)Desc) as row\_no

from invoice\_line

join invoice on invoice\_line.invoice\_id = invoice.invoice\_id

join customer on customer.customer\_id = invoice.customer\_id

join track on invoice\_line.track\_id = track.track\_id

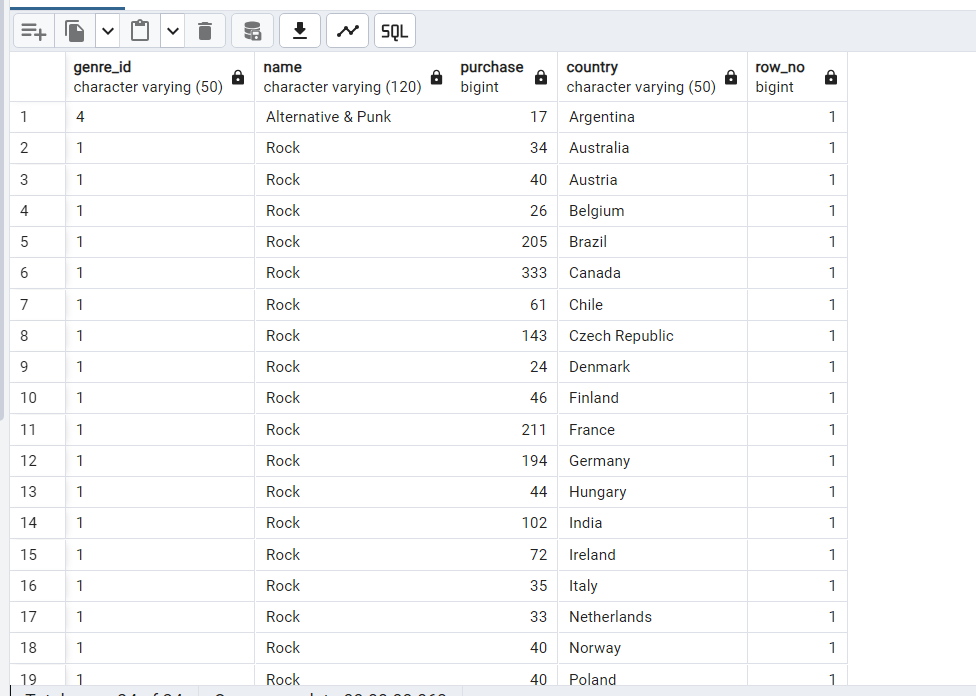
join genre on track.genre\_id = genre.genre\_id

group by 1,2,4

order by 4 asc, 3 desc

)

select \* from genre\_table where row\_no <=1



Q3: 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.

with recursive

customer\_with\_country as (

select customer.customer\_id, last\_name, first\_name, billing\_country, sum(total) as spent\_money

from invoice

join customer on customer.customer\_id = invoice.customer\_id

group by 1,2,3,4

order by 1, 5 desc),

country\_max\_spending as(

select billing\_country,max(spent\_money) as spending

from customer\_with\_country

group by billing\_country)

select cc.billing\_country,cc.spent\_money,cc.last\_name,cc.first\_name,cc.customer\_id

from customer\_with\_country cc

join country\_max\_spending ms on cc.billing\_country = ms.billing\_country

where cc.spent\_money = ms.spending

order by 1

