**Digital Music Store Analysis**

**Objective**- To examine the database with SQL and help the store understand its business growth by answering simple questions.

**/\*Q.1 Who is senior most employee based on job title?\*/**

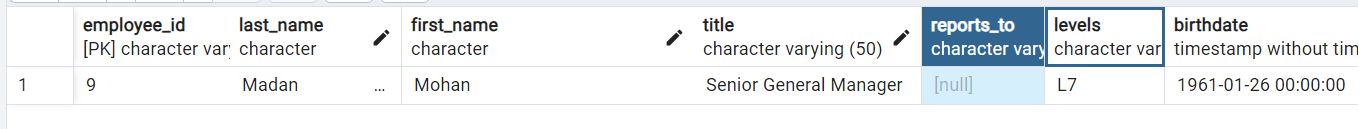
**Query**

select \* from employee

order by levels desc

limit 1

**Output**



**/\*Q.2 Which country have most invoice?\*/**

**Query**

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

from invoice

group by billing\_country

order by c desc

**Output**



**/\*Q.3 What are top 3 values of total invoice?\*/**

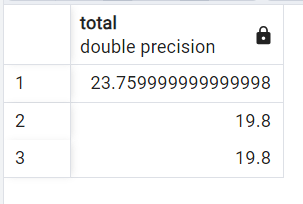
**Query**

select total from invoice

order by total desc

limit 3

**Output**



**/\*Q.4 Which city has best customers?\*/**

**Query**

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

from invoice

group by billing\_city

order by invoice\_total desc

**Output**



-**-Q.5 Who is best customer?The customer who has spent the most money money**

**-- will be declared as best cutomer. Write a query that return the person**

**--who has spent the most money**

**Query**

select customer.customer\_id, customer.first\_name, customer.last\_name, sum(invoice.total) as total

from customer

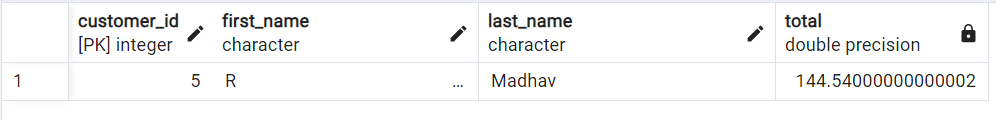
join invoice on customer.customer\_id=invoice.customer\_id

group by customer.customer\_id

order by total desc

limit 1

**Output**



**--Q.6 Write a query to return the email, first name, last name & genre of all rock music listeners.**

**--Return you list ordered alphabatically by email starting by A**

**Query**

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

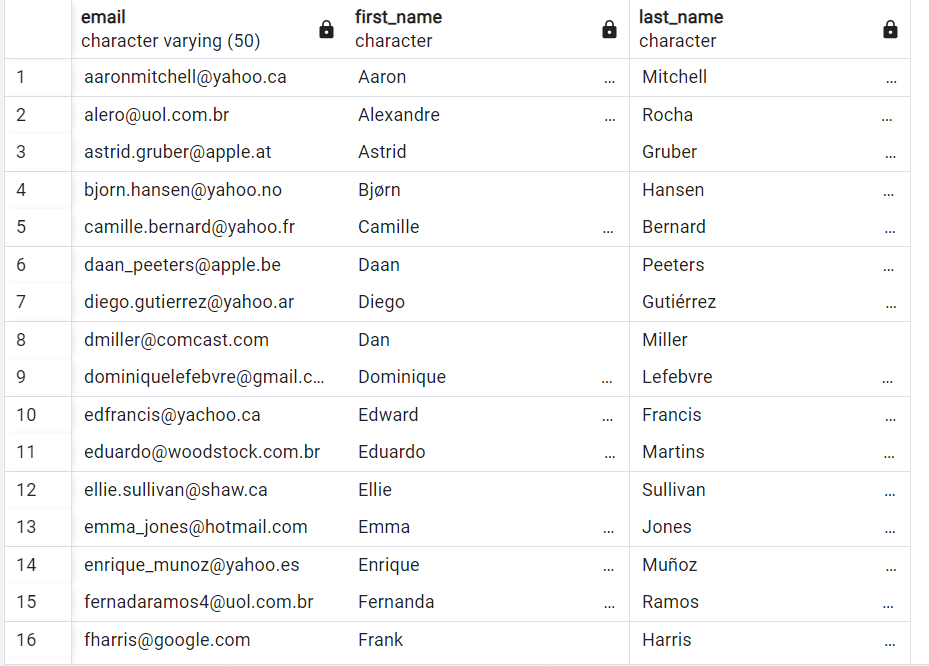
join genre on track.genre\_id=genre.genre\_id

where genre.name like 'Rock'

)

order by email;

**Output**



**--Q.7 Let's invite the artist who have written the most rock music in out dataset. Write a query**

**--that returns the artist name and total track count of 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

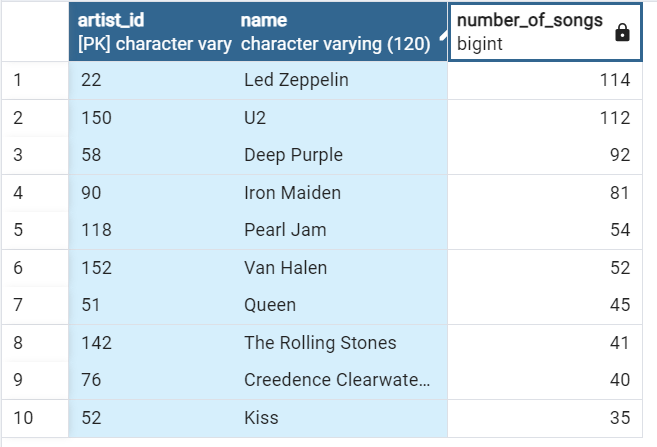
where genre.name like 'Rock'

group by artist.artist\_id

order by number\_of\_songs desc

limit 10;

**Output**



**--Q.8 Return all the track names that have a song length longer than the average song length.**

**--Return the name and miliseconds for each track. Order by the song length with the longest songs**

**--listed first.**

**Query**

select name,milliseconds

from track

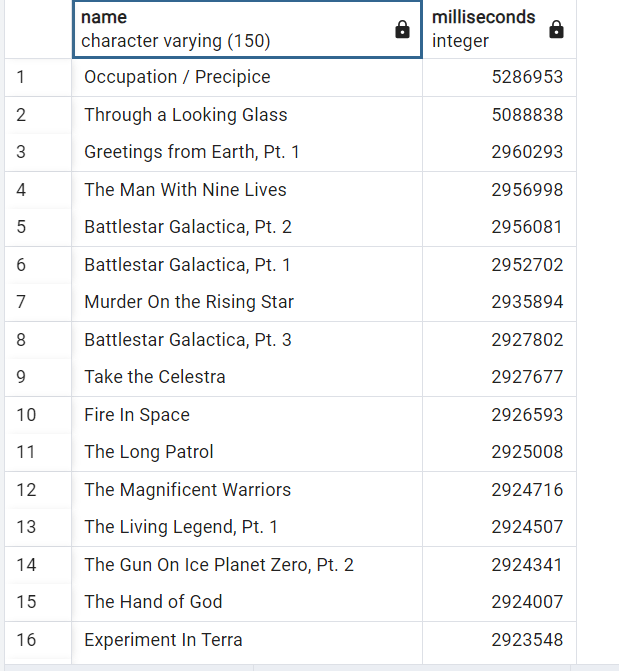
where milliseconds>(

select avg(milliseconds) as avg\_track\_length

from track)

order by milliseconds desc;

**Output**



**--Q.9 How much amount spent by each customer on artists? Write a query to return customer name, artist name and total spent.**

**Query**

WITH best\_selling\_artist AS (

SELECT artist.artist\_id AS artist\_id, artist.name AS artist\_name, SUM(invoice\_line.unit\_price\*invoice\_line.quantity) AS total\_sales

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 1

ORDER BY 3 DESC

LIMIT 1

)

SELECT c.customer\_id, c.first\_name, c.last\_name, bsa.artist\_name, SUM(il.unit\_price\*il.quantity) AS amount\_spent

FROM invoice i

JOIN customer c ON c.customer\_id = i.customer\_id

JOIN invoice\_line il ON il.invoice\_id = i.invoice\_id

JOIN track t ON t.track\_id = il.track\_id

JOIN album alb ON alb.album\_id = t.album\_id

JOIN best\_selling\_artist bsa ON bsa.artist\_id = alb.artist\_id

GROUP BY 1,2,3,4

ORDER BY 5 DESC;

**Output**

