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

Solution:-

SELECT title, last\_name, first\_name

FROM employee

ORDER BY levels DESC

LIMIT 1

**\* Q2: Which countries have the most Invoices? \***

Solution:-

SELECT COUNT(\*) AS c, billing\_country

FROM invoice

GROUP BY billing\_country

ORDER BY c DESC

**\* Q3: What are top 3 values of total invoice? \***

Solution:-

SELECT total

FROM invoice

ORDER BY total DESC

**\* 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 that has the highest sum of invoice totals.**

**Return both the city name & sum of all invoice totals \***

Solution:-

SELECT billing\_city,SUM(total) AS InvoiceTotal

FROM invoice

GROUP BY billing\_city

ORDER BY InvoiceTotal DESC

LIMIT 1;

**\* 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.\***

Solution:-

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;

**\* 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. \***

Solution:-

/\*Method 1 \*/

SELECT DISTINCT email,first\_name, last\_name

FROM customer

JOIN invoice ON customer.customer\_id = invoice.customer\_id

JOIN invoiceline ON invoice.invoice\_id = invoiceline.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;

/\* Method 2 \*/

SELECT DISTINCT email AS Email,first\_name AS FirstName, last\_name AS LastName, genre.name AS Name

FROM customer

JOIN invoice ON invoice.customer\_id = customer.customer\_id

JOIN invoiceline ON invoiceline.invoice\_id = invoice.invoice\_id

JOIN track ON track.track\_id = invoiceline.track\_id

JOIN genre ON genre.genre\_id = track.genre\_id

WHERE genre.name LIKE 'Rock'

ORDER BY email;

**\* 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. \***

Solution:-

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;

**\* 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. \***

Solution:-

SELECT name,miliseconds

FROM track

WHERE miliseconds > (

SELECT AVG(miliseconds) AS avg\_track\_length

FROM track )

ORDER BY miliseconds DESC;

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