

music store analysis





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

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





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 top 3 values of total invoice?

```
SELECT total  
FROM invoice  
ORDER BY 1 DESC  
limit 3
```





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?

```
SELECT total  
FROM invoice  
ORDER BY 1 DESC  
limit 3
```





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, 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.**



```
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 ?

```
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.**

```
SELECT name,milliseconds  
FROM track  
WHERE milliseconds > (  
  SELECT AVG(milliseconds) AS avg_track_length  
  FROM track )  
ORDER BY milliseconds DESC;
```



Q9 Find how much amount spent by each customer on artists? Write a query to return customer name, artist name and total spent ?

```
select c.first_name || ' ' || c.last_name as customer_name, a.name as artist_name,  
sum(il.unit_price * il.quantity) as total_spent  
from customer c  
inner join invoice i on  
c.customer_id = i.customer_id  
inner join invoice_line il on  
i.invoice_id = il.invoice_id  
inner join track t on  
t.track_id = il.track_id  
inner join album al on  
al.album_id = t.album_id  
inner join artist a on  
al.artist_id = a.artist_id  
group by 1,2  
order by 3 desc
```



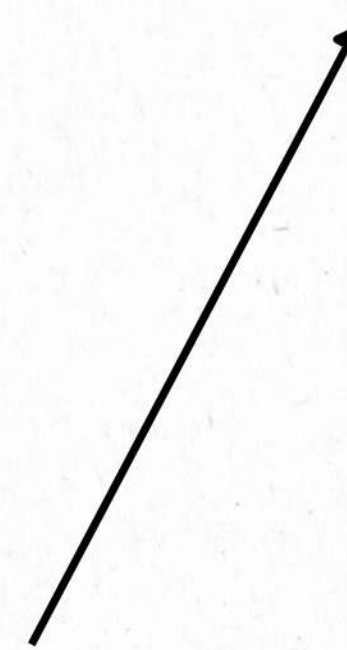
Q10 We want to find out the most popular music Genre for each country. We determine the most popular genre as the genre with the highest amount of purchases. Write a query that returns each country along with the top Genre. For countries where the maximum number of purchases is shared return all Genres.?



WITH popular_genre AS

(
 SELECT COUNT(invoice_line.quantity) AS purchases,
 customer.country, 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



Q11 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 popular_genre AS

(
 SELECT COUNT(invoice_line.quantity) AS purchases,
 customer.country, 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



Thank You

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