

NOTE - Replace 'propane-ground-386006.Music_store' with your dataset name in all the queries

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

```
WITH highest_sell AS (  
    SELECT  
        artist.artist_id AS ID,  
        artist.name AS artist_name,  
        ROUND(SUM(invoice_line.unit_price*invoice_line.quantity),2) AS total_sales  
    FROM  
        propane-ground-386006.Music_store.artist AS artist  
    JOIN  
        propane-ground-386006.Music_store.album AS album ON album.artist_id=artist.artist_id  
    JOIN  
        propane-ground-386006.Music_store.track AS track ON track.album_id=album.album_id  
    JOIN  
        propane-ground-  
386006.Music_store.invoice_line AS invoice_line ON invoice_line.track_id=track.track_id  
    GROUP BY  
        ID,artist_name  
    ORDER BY  
        total_sales DESC  
    LIMIT 1  
)  
SELECT  
    CONCAT(customer.first_name," ",customer.last_name) AS Customer_Name,  
    hs.artist_name,  
    ROUND(SUM(invoice_line.unit_price*invoice_line.quantity),2) AS amount_spent  
FROM  
    propane-ground-386006.Music_store.customer AS customer  
    JOIN  
        propane-ground-  
386006.Music_store.invoice AS invoice ON invoice.customer_id=customer.customer_id  
    JOIN  
        propane-ground-  
386006.Music_store.invoice_line AS invoice_line ON invoice_line.invoice_id=invoice.invoice_id  
    JOIN  
        propane-ground-386006.Music_store.track AS track ON track.track_id = invoice_line.track_id  
    JOIN  
        propane-ground-386006.Music_store.album AS album ON album.album_id=track.album_id  
    JOIN  
        highest_sell hs ON hs.ID=album.artist_id  
GROUP BY  
    Customer_Name,hs.artist_name  
ORDER BY  
    amount_spent DESC
```

/* 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. 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
    propane-ground-386006.Music_store.invoice_line AS invoice_line
JOIN
    propane-ground-
386006.Music_store.invoice AS invoice ON invoice.invoice_id = invoice_line.invoice_id
JOIN
    propane-ground-
386006.Music_store.customer AS customer ON customer.customer_id=invoice.customer_id
JOIN
    propane-ground-386006.Music_store.track AS track ON track.track_id=invoice_line.track_id
JOIN
    propane-ground-386006.Music_store.genre AS 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

```

/* 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 Customer_with_country AS (
    SELECT customer.customer_id,first_name,last_name,billing_country,SUM(total) AS total_spending,
        ROW_NUMBER() OVER(PARTITION BY billing_country ORDER BY SUM(total) DESC) AS RowNo
    FROM propane-ground-386006.Music_store.invoice AS invoice
    JOIN propane-ground-
386006.Music_store.customer AS customer ON customer.customer_id = invoice.customer_id
    GROUP BY 1,2,3,4
    ORDER BY 4 ASC,5 DESC)
SELECT * FROM Customer_with_country WHERE RowNo <= 1

```