**SQL PROJECT**

**MUSIC STORE DATA ANALYSIS**

**STEPS:-**

**1.Create Database and use it.**

**2.IMPORT FILES IN SQL SERVER.**

**3.ANALYSING THE DATA.**

**4.WORKING ON DIFFERENT QUESTIONS.**

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**SETUP DATABASE:-**

use Music\_Store\_Analysis;

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SEEING DATA OF IMPORTED TABLE

SELECT \* FROM customer

SELECT \* FROM invoice

SELECT \* FROM invoice\_line

SELECT \* FROM media\_type

SELECT \* FROM employee

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

SELECT top 1 last\_name,first\_name,title

from employee

ORDER BY levels desc;

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

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

from invoice

group by billing\_country

order by c desc;

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

SELECT \* FROM invoice;

SELECT top 3 total

FROM invoice

ORDER BY total DESC;

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**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 top 1 billing\_city,SUM(total) as invoice\_totals

from invoice

group by billing\_city

order by invoice\_totals desc;

**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 c.customer\_id,c.first\_name,c.last\_name,sum(i.total) as spent\_money

from customer as c

join invoice as i

on c.customer\_id=i.customer\_id

group by c.customer\_id

order by spent\_money desc;

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**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 invoice\_line

ON invoice\_line.invoice\_id = invoice.invoice\_id

JOIN track

ON track.track\_id = invoice\_line.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 a.artist\_id,a.name,count(a.artist\_id)as number\_of\_songs

from track as t

join album as al

on al.album\_id=t.album\_id

join artist as a

on a.artist\_id=al.album\_id

join genre as g

on g.genre\_id=t.genre\_id

where g.name like 'Rock'

group by a. artist\_id

order by number\_of\_songs desc;

**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\_song\_length

from track)

order by milliseconds desc;

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

WITH best\_selling\_artist AS (

SELECT top 1 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 artist.artist\_id

ORDER BY total\_sales DESC

)

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 c.customer\_id, c.first\_name, c.last\_name, bsa.artist\_name

ORDER BY amount\_spent DESC;

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**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 customer.country, genre.name, genre.genre\_id

--ORDER BY customer.country ASC, purchases DESC

)

SELECT \* FROM popular\_genre WHERE RowNo <= 1

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**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 Customter\_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 invoice

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

GROUP BY customer.customer\_id,first\_name,last\_name,billing\_country)

--ORDER BY billing\_country ASC,total\_spending DESC

SELECT \* FROM Customter\_with\_country WHERE RowNo <= 1

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