SQL Project On Music Store Data

REPRESENTED BY:-

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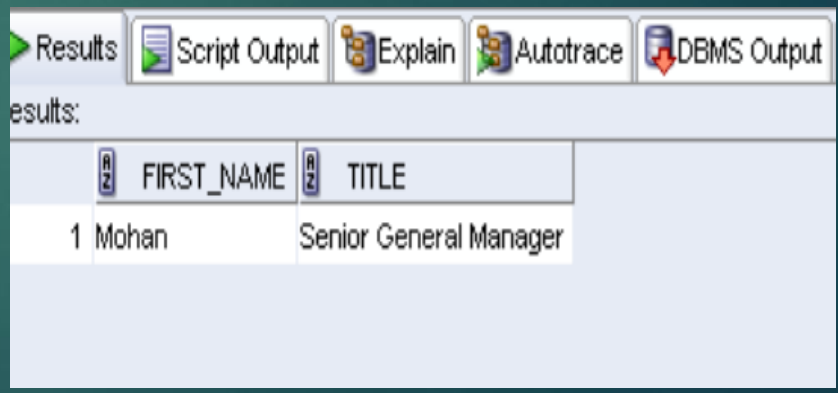
Introduction

- In this project , I analyze music store data and load this data into SQL tables Using SQL loader.
- The Music Store Data Project is designed to explore, analyze, and derive insights from a relational database containing data about a digital music store.
- The music store database typically includes multiple interrelated tables such as customers, artists, albums, tracks, invoices, genres, and employees. By writing and executing SQL queries, this project aims to answer key business questions such as customer purchasing behavior, sales trends by genre or artist, employee performance, and geographic distribution of sales.
- It serves as a practical application of database concepts such as joins, subqueries, filtering, grouping, and sorting to gain meaningful insights that can support data-driven decision-making in the music retail industry.

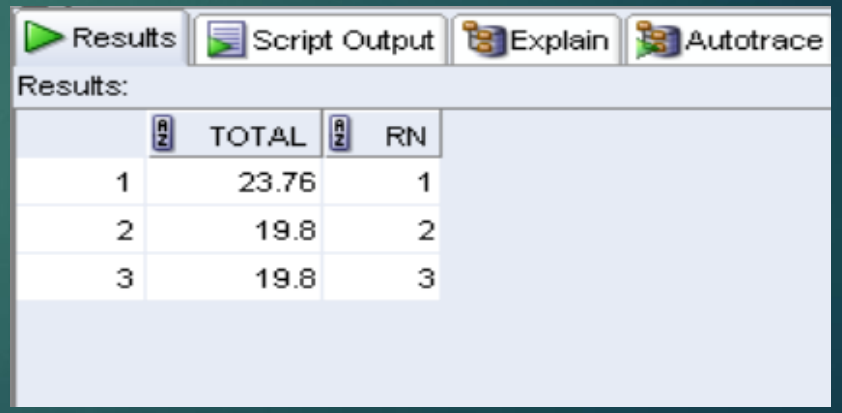
Senior most employee based on Job title

```
select first_name,title from employee
where title like 'Senior%';
```



Top 3 Values of Total Invoice

```
select * from(select total,row_number()over
(order by total desc)as RN from invoice)
where RN<=3;
```



	TOTAL	RN
1	23.76	1
2	19.8	2
3	19.8	3

Customer name who Spent Most money in Music Store

```
select first_name,TotalSpents from(select c.first_name,sum(i.total)
as TotalSpents,Rank()over(order by sum(i.total)desc)
as RNK from customer c inner join invoice i on c.customer_id=i.customer_id
group by c.first_name)where RNK=1;
```

Results | Script Output | Explain | Autotrace

Results:

	FIRST_NAME	TOTALSPENTS
1	Frank	145.53

Top 10 Artists who written the most rock music in our dataset

```
select name,TotalTracks from(select a.name,count(t.track_id)
as TotalTracks,Rank()over(order by count(t.track_id)desc)
as RNK from artist a inner join album al on
a.artist_id=al.artist_id inner join track t
on al.album_id=t.album_id inner join
genre g on t.genre_id=g.genre_id and g.name like'Rock'
group by a.name)where RNK<=10;
```

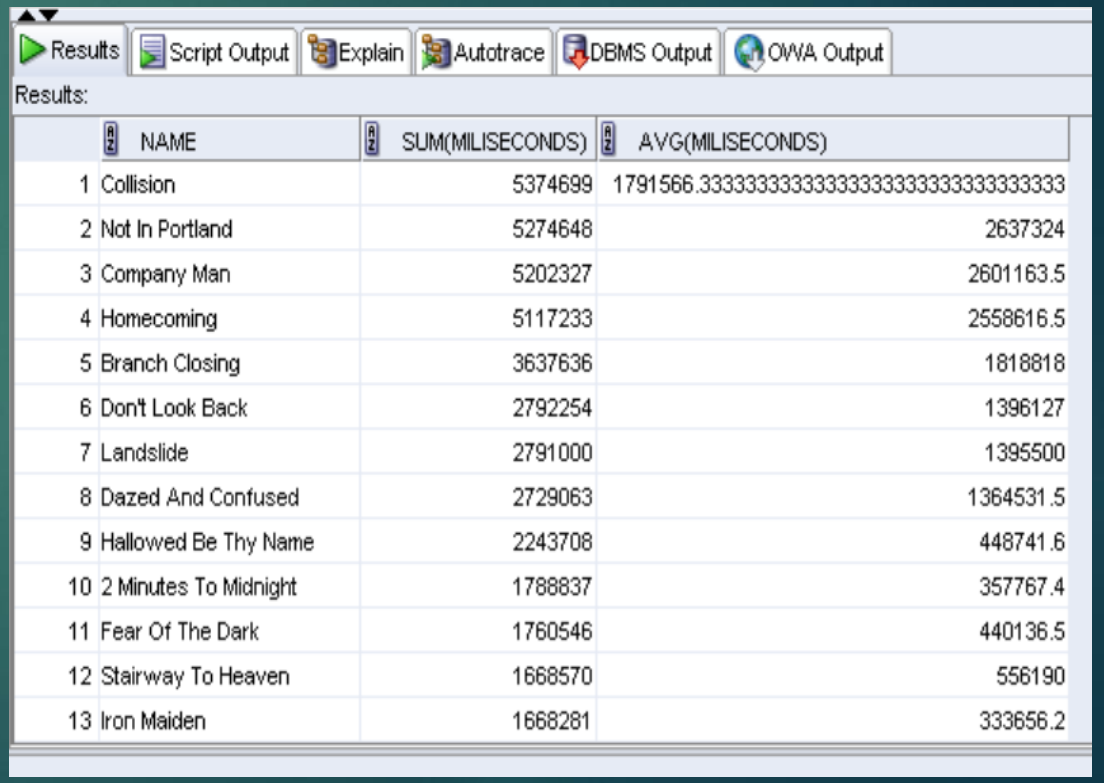
Results | Script Output | Explain | Autotrace | DBMS Output

Results:

	NAME	TOTALTRACKS
1	Led Zeppelin	114
2	U2	112
3	Deep Purple	92
4	Iron Maiden	81
5	Pearl Jam	54
6	Van Halen	52
7	Queen	45
8	The Rolling Stones	41
9	Creedence Clearwater Revival	40
10	Kiss	35

Tracks which length is longer than the average Track length

```
select name,sum(miliseconds),avg(miliseconds)
from track group by name
having sum(miliseconds)>avg(miliseconds)
order by sum(miliseconds)desc;
```



Results | Script Output | Explain | Autotrace | DBMS Output | OWA Output

Results:

	NAME	SUM(MILISECONDS)	AVG(MILISECONDS)
1	Collision	5374699	1791566.3333333333333333333333333333333
2	Not In Portland	5274648	2637324
3	Company Man	5202327	2601163.5
4	Homecoming	5117233	2558616.5
5	Branch Closing	3637636	1818818
6	Don't Look Back	2792254	1396127
7	Landslide	2791000	1395500
8	Dazed And Confused	2729063	1364531.5
9	Hallowed Be Thy Name	2243708	448741.6
10	2 Minutes To Midnight	1788837	357767.4
11	Fear Of The Dark	1760546	440136.5
12	Stairway To Heaven	1668570	556190
13	Iron Maiden	1668281	333656.2

Total amount spent by each customer on Artists

```
select c.first_name,a.name,sum(i.total)as TotalSpents
from customer c,invoice i,invoice_line il,track t,album al,
artist a where c.customer_id=i.customer_id and
i.invoice_id=il.invoice_id and il.track_id=t.track_id
and t.album_id=al.album_id and al.artist_id=a.artist_id
group by c.first_name,a.name;
```

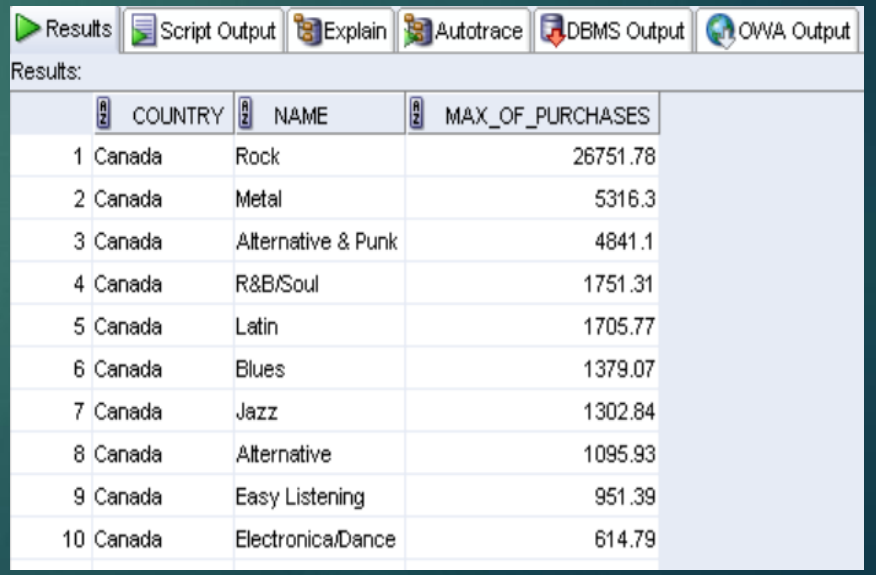
Results | Script Output | Explain | Autotrace | DBMS Output | OWA Output

Results:

	FIRST_NAME	NAME	TOTALSPENTS
1	Edward	Godsmack	7.92
2	Martha	Nirvana	18.81
3	Hannah	Billy Cobham	10.89
4	Aaron	James Brown	396
5	Wyatt	Deep Purple	28.71
6	Wyatt	The Doors	9.9
7	Wyatt	UB40	9.9
8	Joakim	The Clash	7.92
9	Daan	Marvin Gaye	5.94
10	Daan	Iron Maiden	19.8

Country which has Maximum purchases in music Order by popular Genre name

```
select e.country,g.name,sum(i.total)as Max_of_Purchases
from employee e,customer c,invoice i,invoice_line il,track t,
genre g where e.employee_id=c.support_rep_id and
c.customer_id=i.customer_id and i.invoice_id=il.invoice_id
and il.track_id=t.track_id and t.genre_id=g.genre_id
group by e.country,g.name order by sum(i.total)desc;
```



Results | Script Output | Explain | Autotrace | DBMS Output | OWA Output

Results:

	COUNTRY	NAME	MAX_OF_PURCHASES
1	Canada	Rock	26751.78
2	Canada	Metal	5316.3
3	Canada	Alternative & Punk	4841.1
4	Canada	R&B/Soul	1751.31
5	Canada	Latin	1705.77
6	Canada	Blues	1379.07
7	Canada	Jazz	1302.84
8	Canada	Alternative	1095.93
9	Canada	Easy Listening	951.39
10	Canada	Electronica/Dance	614.79

Country Wise Maximum Amount Spent On music by each Customer

```
select e.country,c.first_name,sum(i.total)as
Total_Amount_Spents from employee e,customer c,invoice i
where e.employee_id=c.support_rep_id and
c.customer_id=i.customer_id group by
e.country,c.first_name
order by sum(i.total)desc;
```

Results | Script Output | Explain | Autotrace | DBMS Output | OWA Output

Results:

	COUNTRY	FIRST_NAME	TOTAL_AMOUNT_SPENTS
1	Canada	Frank	145.53
2	Canada	FrantiÃ¡jek	144.54
3	Canada	Helena	128.7
4	Canada	Hugh	114.84
5	Canada	Manoj	111.87
6	Canada	Mark	110.88
7	Canada	LuÃ-s	108.9
8	Canada	Fernanda	106.92
9	Canada	JoÃ£o	102.96
10	Canada	FranÃ§ois	99.99

Key Insights

- Canada is a most popular country for music Sales.
- Rock band is a most loved genre in music store.
- Customer has spent most money on artists.
- Led Zeppelin is written most amount of rock music.
- Frank is a customer who has spent most amount for buying tracks.