THE DATABASES FROM "CHINOOK"

DIGITAL MUSIC STORE

EER DIAGRAM
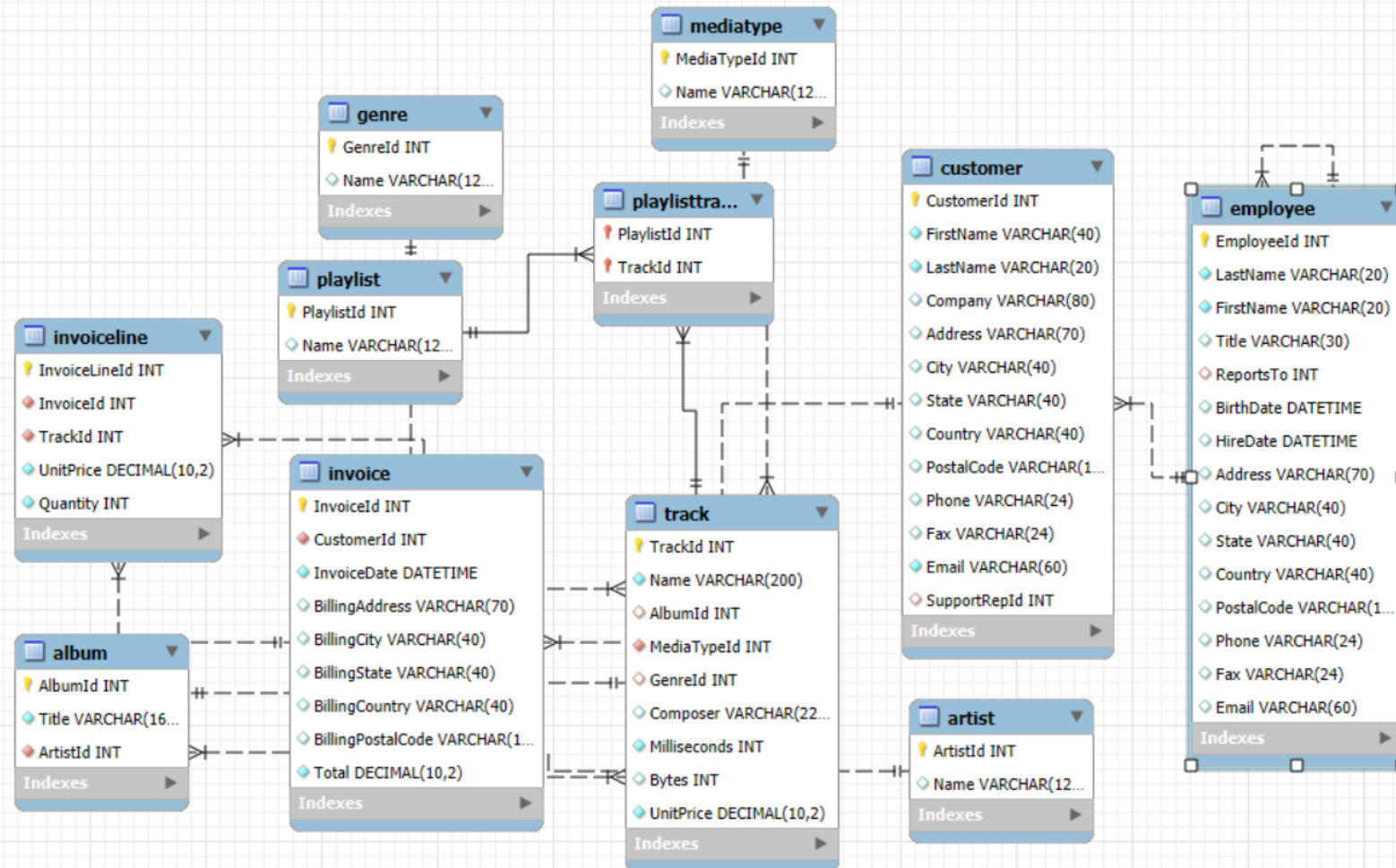
1.QUERY TO FIND AVG OF MILLISECONDS PLAYED IN TRACK .

```sql
SELECT AVG(MILLISECONDS) AS AVGMILLISECONDS
FROM TRACK;
```

AVGMILLISECONDS
▶ 393599.2121

2.QUERY TO FIND TOTAL NUMBER OF CUSTOMERS .

```sql
SELECT COUNT(CUSTOMERID) AS TOTAL_CUSTOMER
FROM CUSTOMER;
```

TOTAL_CUSTOMER	
▶ 59	59

3.QUERY TO FIND TOTAL REVENUE IN INVOICE .

```sql
SELECT SUM(TOTAL) AS TOTAL_REVENUE
FROM INVOICE;
```

TOTAL_REVENUE
▶ 2328.60

4. Which five countries generated the highest total sales based on the billing information?

QUERY

```sql
SELECT distinct  BILLINGCOUNTRY ,
SUM(TOTAL) AS TOTAL_SALES
FROM  INVOICE
GROUP BY BILLINGCOUNTRY
ORDER BY TOTAL_SALES desc
LIMIT 5;
```

OUTPUT

BILLINGCOUNTRY	TOTAL_SALES
USA	523.06
Canada	303.96
France	195.10
Brazil	190.10
Germany	156.48

- IN THIS I FETCH THE DATA FROM INVOICE TABLE AND GET THE VALUE OF TOTAL SALES OF TOP 5 COUNTRY .

5.List all unique tracks that have been sold, along with their price and the quantity sold.
(INNER JOIN)

QUERY

OUTPUT

```sql
SELECT distinct TRACK.NAME,
TRACK.UNITPRICE,
INVOICELINE.QUANTITY
FROM TRACK
INNER JOIN INVOICELINE
ON TRACK.TRACKID = INVOICELINE.TRACKID;
```

NAME	UNITPRICE	QUANTITY
Balls to the Wall	0.99	1
Restless and Wild	0.99	1
Put The Finger On You	0.99	1
Inject The Venom	0.99	1
Evil Walks	0.99	1
Breaking The Rules	0.99	1
Dog Eat Dog	0.99	1

- IN THIS QUERY FIND THE VALUE FROM TRACK TABLE TO FETCH THE UNTIPRICE AND QUANTITY .
  - BY USING INNER JOIN .

6.Top 5 - CUSTOMER GENERATED HIGHEST REVENU
(Joints)

Query

```sql
SELECT INVOICE.CUSTOMERID ,
CUSTOMER.FIRSTNAME ,
CUSTOMER.COUNTRY ,
SUM(TOTAL) AS HIGHREVENUE
FROM INVOICE INVOICE
JOIN CUSTOMER CUSTOMER
ON INVOICE.CUSTOMERID= CUSTOMER.CUSTOMERID
GROUP BY  CUSTOMERID
ORDER BY HIGHREVENUE DESC
LIMIT 5;
```

Output

CUSTOMERID	FIRSTNAME	COUNTRY	HIGHREVENUE
6	Helena	Czech Republic	49.62
26	Richard	USA	47.62
57	Luis	Chile	46.62
45	Ladislav	Hungary	45.62
46	Hugh	Ireland	45.62

- THIS QUERY TO FIND THE TOP 5 COUNTRY MADE HIGH REVENUE BY CALCULATE BY TOTAL .
- USING INNER JOIN AND GROUP BY ,ORDER BY FUNCTION .

7.Which three artists have the highest number of tracks in the music database. (JOIN)

Query

```sql
SELECT (AR.NAME)AS ARTIST_NAME,
COUNT(T.TRACKID) AS TRACKCOUNT
FROM ARTIST AR
JOIN ALBUM AL ON AL.ARTISTID = AR.ARTISTID
JOIN TRACK T ON AL.ALBUMID= T.ALBUMID
GROUP BY AR.ARTISTID
ORDER BY TRACKCOUNT desc
LIMIT 3;
```

Output

	ARTIST_NAME	TRACKCOUNT
►	Iron Maiden	213
	U2	135
	Led Zeppelin	114

- IN THIS QUERY ABOUT FIND TOP 3 ARTIST ARE MADE HIGH TRACKS .
- USING INNER JOIN TO JOIN THREE TABLES

8.QUERY TO FIND EACH EMPLOYEE EXPERIENCE BY HIREDATE .

Query

```sql
SELECT EMPLOYEEID ,
FIRSTNAME,
COUNTRY,
HIREDATE ,
timestampdiff(YEAR,HIREDATE,CURDATE()) AS EXPERIENCE
FROM EMPLOYEE;
```

- THIS QUERY TO FIND THE EACH EMPLOYEE EXPERIENCE CALCULATE BY HIRE DATE FROM EMPLOYEE TABLE .
- USING TIMESTAMDIFF DATE FUNCTION .

Output

EMPLOYEEID	FIRSTNAME	COUNTRY	HIREDATE	EXPERIENCE
1	Andrew	Canada	2002-08-14 00:00:00	22
2	Nancy	Canada	2002-05-01 00:00:00	23
3	Jane	Canada	2002-04-01 00:00:00	23
4	Margaret	Canada	2003-05-03 00:00:00	22
5	Steve	Canada	2003-10-17 00:00:00	21
6	Michael	Canada	2003-10-17 00:00:00	21
7	Robert	Canada	2004-01-02 00:00:00	21
8	Laura	Canada	2004-03-04 00:00:00	21

9.QUERY TO FIND EACH EMPLOYEE'S AND THE AVERAGE INVOICE. (SUBQUERY)

Query

```sql
SELECT
    FirstName,
    LastName,
    (SELECT AVG(Total) FROM Invoice) AS AverageInvoiceTotal
FROM
    Employee;
```

Output

FirstName	LastName	AverageInvoiceTotal
Andrew	Adams	5.651942
Nancy	Edwards	5.651942
Jane	Peacock	5.651942
Margaret	Park	5.651942
Steve	Johnson	5.651942
Michael	Mitchell	5.651942
Robert	King	5.651942
Laura	Callahan	5.651942

- QUERY TO FIND EACH EMPLOYEE AVERAGE TOTAL .
- BY USING SUBQUERY .

10. much revenue has each customer generated for the company. (SUBQUERY)

Query

```
• SELECT distinct COUNTRY , FIRSTNAME ,

      (SELECT SUM(TOTAL)

      FROM INVOICE

      WHERE  CUSTOMER.CUSTOMERID = INVOICE.CUSTOMERID)AS CUSTOMERINVOICE

FROM CUSTOMER

ORDER BY COUNTRY ASC;
```

Output

COUNTRY	FIRSTNAME	CUSTOMERINVOICE
Argentina	Diego	37.62
Australia	Mark	37.62
Austria	Astrid	42.62
Belgium	Daan	37.62
Brazil	Alexandre	37.62
Brazil	Eduardo	37.62
Brazil	Fernanda	37.62
Brazil	Luís	39.62
Brazil	Roberto	37.62
Canada	Aaron	37.62
Canada	Edward	37.62
Canada	Ellie	37.62
Canada	François	39.62
Canada	Jennifer	38.62
Canada	Mark	37.62

- QUERY TO FIND TOTAL CUSTOMER INVOICE BY USING SUBQUERY AND ORDERBY COUNTRY .

11.Which support employees handled the least revenue, and who were their customers.(window function)

```sql
select e.employeeid ,
 e.firstname as employee_name  ,
c.firstname as customer_name ,
 i.billingcountry ,
 sum(i.total) over(partition by i.total order by e.employeeid ) as total_handled
 from customer c
 join employee e on c.supportrepid = e.employeeid
 join invoice i on c.customerid = i.customerid
 order by total_handled
 limit 5;
```

Output

employeeid	employee_name	customer_name	billingcountry	total_handled
4	Margaret	Dominique	France	2.98
3	Jane	Puja	India	5.97
3	Jane	Tim	USA	5.97
3	Jane	Manoj	India	5.97
5	Steve	Joakim	Sweden	6.94

- THE TOP 5 EMPLOYEES ARE MAKE TOTAL REVENUE AND HANDLE OF CUSTOMER AFTER USING WINDOWS FUNCTIONS BY ORDER BY TOTAL HANDLED .

12.Which are the top 10 largest tracks by file size across all albums. (windows function)

Query

```
select  al.title as album_name ,
t.name as track_name ,
rank() over(order by t.bytes desc ) as ranking_by_bytes
from track t
join album al on t.albumid = al.albumid
limit 10;
```

Output

album_name	track_name	ranking_by_bytes
Lost, Season 3	Through a Looking Glass	1
Battlestar Galactica, Season 3	Occupation / Precipice	2
Battlestar Galactica (Classic), Season 1	The Young Lords	3
Battlestar Galactica (Classic), Season 1	The Man With Nine Lives	4
Lost, Season 2	Dave	5
Battlestar Galactica (Classic), Season 1	The Magnificent Warriors	6
Battlestar Galactica (Classic), Season 1	The Lost Warrior	7
Lost, Season 2	Maternity Leave	8
Battlestar Galactica (Classic), Season 1	Battlestar Galactica, Pt. 3	9
Battlestar Galactica, Season 3	The Woman King	10

- TO FIND THE TOP 10 ALBUMS ARE GET HIGH BYTES FROM TRACK TABLE AND RANK BY WINDOWS FUNCTION .