**QUERIES IN MYSQL:**

use chinook;

select \* from invoiceline;

-- a. Total sales

select sum(quantity\*unitprice) as total\_sales from invoiceline;

-- b. Total sales by country – ranked

select sum(quantity\*unitprice) as total\_sales, inv.billingcountry from invoiceline invl

INNER JOIN invoice inv on invl.invoiceid = inv.invoiceid

group by inv.billingcountry

order by total\_sales desc;

-- c. Total sales by country, state & city

select sum(Total) as "Total\_Sales" ,Country,State,City from invoice i

inner join customer c on i.CustomerId = c.CustomerId

group by Country

order by Total\_Sales desc;

-- d. Total sales by customer – ranked

select concat(cus.firstname,"",cus.lastname) as Customer\_name, sum(quantity\*unitprice) as Total\_sales from invoiceline invl

INNER JOIN invoice inv on invl.invoiceid = inv.invoiceid

INNER JOIN customer cus on inv.customerid = cus.customerid

group by Customer\_name

order by Total\_sales desc;

-- e. Total sales by artist – ranked

select ar.name as Artist, sum(invl.quantity\*invl.unitprice) as Total\_sales from invoiceline invl

INNER JOIN track t on invl.trackid = t.trackid

INNER JOIN album a on t.albumid = a.albumid

INNER JOIN artist ar on a.artistid = ar.artistid

group by Artist

order by Total\_sales desc;

-- f. Total sales by artist & their albums

select ar.name as Artist, a.title as Album, sum(invl.quantity\*invl.unitprice) as Total\_sales from invoiceline invl

INNER JOIN track t on invl.trackid = t.trackid

INNER JOIN album a on t.albumid = a.albumid

INNER JOIN artist ar on a.artistid = ar.artistid

group by Artist, Album

order by Total\_sales desc;

-- g. Total sales by sales person (employee)

ALTER TABLE employee

ADD age INT ;

UPDATE employee SET age= YEAR(CURDATE()) - YEAR(birthdate);

ALTER TABLE employee

ADD age\_group Varchar(10);

UPDATE employee SET age\_group= '40-50' where age between 40 and 50;

UPDATE employee SET age\_group= '50-60' where age between 50 and 60;

UPDATE employee SET age\_group= '60-70' where age between 60 and 70;

UPDATE employee SET age\_group= '70-80' where age between 70 and 80;

select concat(e.firstname," ",e.lastname) as Sales\_Person, sum(quantity\*unitprice) as Total\_sales , count(Quantity) as Quantity, age\_group from employee e

INNER JOIN customer c on e.employeeid = c.supportrepid

INNER JOIN invoice i on i.customerid = c.customerid

INNER JOIN invoiceline on i.invoiceid = invoiceline.invoiceid

group by e.employeeid, age\_group;

-- h. Total tracks bought and total cost by media type

select mt.name as MediaType, sum(invl.quantity) as Quantity, sum(invl.quantity\*invl.unitprice) as "Total\_cost\_by\_media\_type" from invoiceline invl

INNER JOIN track t on invl.trackid = t.trackid

INNER JOIN mediatype mt on t.mediatypeid = mt.mediatypeid

group by MediaType

order by Total\_cost\_by\_media\_type, quantity desc;

**QUERIES IN MS-SQL:**

use Chinook;

select \* from invoiceline;

-- a. Total sales

select sum(quantity\*unitprice) as total\_sales from invoiceline;

-- b. Total sales by country – ranked

select sum(quantity\*unitprice) as total\_sales, inv.billingcountry from invoiceline invl

INNER JOIN invoice inv on invl.invoiceid = inv.invoiceid

group by inv.billingcountry

order by total\_sales desc;

-- c. Total sales by country, state & city

select sum(Total) as "Total\_Sales" ,i.BillingCountry, i.BillingState, i.BillingCity from invoice i

inner join customer c on i.CustomerId = c.CustomerId

group by i.BillingCountry,i.BillingState,i.BillingCity

order by Total\_sales desc;

-- d. Total sales by customer – ranked

select \* from Customer;

select concat(cus.FirstName,cus.LastName) as Customer\_name, sum(quantity\*unitprice) as Total\_sales from invoiceline invl

INNER JOIN invoice inv on invl.invoiceid = inv.invoiceid

INNER JOIN Customer cus on inv.customerid = cus.customerid

group by cus.FirstName,cus.LastName

order by Total\_sales desc;

-- e. Total sales by artist – ranked

select ar.name as Artist, sum(invl.quantity\*invl.unitprice) as Total\_sales from invoiceline invl

INNER JOIN track t on invl.trackid = t.trackid

INNER JOIN album a on t.albumid = a.albumid

INNER JOIN artist ar on a.artistid = ar.artistid

group by ar.Name

order by Total\_sales desc;

-- f. Total sales by artist & their albums

select ar.name as Artist, a.title as Album, sum(invl.quantity\*invl.unitprice) as Total\_sales from invoiceline invl

INNER JOIN track t on invl.trackid = t.trackid

INNER JOIN album a on t.albumid = a.albumid

INNER JOIN artist ar on a.artistid = ar.artistid

group by ar.Name, a.Title

order by Total\_sales desc;

-- g. Total sales by sales person (employee)

select concat\_ws('-',day(Birthdate), month(BirthDate), YEAR(BirthDate)) from Employee;

select \* FROM Employee;

ALTER TABLE Employee

ALTER COLUMN BirthDate date;

select convert(date, getdate()) from Employee

select DATEDIFF(yy,CONVERT(DATETIME, BirthDate),GETDATE()) as Age , concat(e.firstname,e.lastname) as Sales\_Person, sum(quantity\*unitprice) as Total\_sales , count(Quantity) as Quantity from employee e

INNER JOIN customer c on e.employeeid = c.supportrepid

INNER JOIN invoice i on i.customerid = c.customerid

INNER JOIN invoiceline on i.invoiceid = invoiceline.invoiceid

group by e.employeeid;

-- h. Total tracks bought and total cost by media type

select mt.name as MediaType, sum(invl.quantity) as Quantity, sum(invl.quantity\*invl.unitprice) as "Total\_cost\_by\_media\_type" from invoiceline invl

INNER JOIN track t on invl.trackid = t.trackid

INNER JOIN mediatype mt on t.mediatypeid = mt.mediatypeid

group by mt.Name

order by Total\_cost\_by\_media\_type, quantity desc;

**QUERIES IN POSTGRESQL:**

use chinook;

-- a. Total sales

select sum("Quantity"\*"UnitPrice") as Total\_Sales from public."InvoiceLine";

-- b. Total sales by country – ranked

select sum("Quantity"\*"UnitPrice") as Total\_Sales, inv."BillingCountry" from public."InvoiceLine" invl

INNER JOIN public."Invoice" inv using ("InvoiceId")

group by inv."BillingCountry"

order by Total\_Sales desc;

-- c. Total sales by country, state & city

select sum("Total") as Total\_Sales ,i."BillingCountry",i."BillingState",i."BillingCity" from public."Invoice" i

inner join public."Customer" c using ("CustomerId")

group by i."BillingCountry",i."BillingState",i."BillingCity"

order by Total\_Sales desc;

-- d. Total sales by customer – ranked

select cus."FirstName",cus."LastName" , sum("Quantity"\*"UnitPrice") as Total\_sales from public."InvoiceLine" invl

INNER JOIN public."Invoice" inv using ("InvoiceId")

INNER JOIN public."Customer" cus using ("CustomerId")

group by cus."FirstName",cus."LastName"

order by Total\_sales desc;

-- e. Total sales by artist – ranked

select ar."Name" as Artist, sum(invl."Quantity"\*invl."UnitPrice") as Total\_sales from public."InvoiceLine" invl

INNER JOIN public."Track" t using ("TrackId")

INNER JOIN public."Album" a using ("AlbumId")

INNER JOIN public."Artist" ar using ("ArtistId")

group by Artist

order by Total\_sales desc;

-- f. Total sales by artist & their albums

select ar."Name" as Artist, a."Title" as Album, sum(invl."Quantity"\*invl."UnitPrice") as Total\_sales from "InvoiceLine" invl

INNER JOIN public."Track" t using ("TrackId")

INNER JOIN public."Album" a using ("AlbumId")

INNER JOIN public."Artist" ar using ("ArtistId")

group by Artist, Album

order by Total\_sales desc;

-- g. Total sales by sales person (employee)

select cast(YEAR(CURDATE()) - YEAR(BirthDate)) as age , "Firstname","LastName" as Sales\_Person, sum(invl."Quantity"\*invl."UnitPrice") as Total\_sales , count("Quantity") as Quantity from "Employee" e

INNER JOIN public."Customer" c on e."EmployeeId" = c."SupportRepId"

INNER JOIN public."Invoice" i using ("CustomerId")

INNER JOIN public."InvoiceLine" invl using ("InvoiceId")

group by e.employeeid, age;

-- h. Total tracks bought and total cost by media type

select mt."Name" as MediaType, sum(invl."Quantity") as Quantity, sum(invl."Quantity"\*invl."UnitPrice") as Total\_cost\_by\_media\_type from "InvoiceLine" invl

INNER JOIN public."Track" t using ("TrackId")

INNER JOIN public."MediaType" mt using ("MediaTypeId")

group by MediaType

order by Total\_cost\_by\_media\_type, quantity desc;

**QUERIES IN ORACLE:**

-- a. Total sales

select sum(quantity\*unitprice) as total\_sales from invoiceline;

-- b. Total sales by country – ranked

select sum(quantity\*unitprice) as total\_sales, inv.billingcountry from invoiceline invl

INNER JOIN invoice inv on invl.invoiceid = inv.invoiceid

group by inv.billingcountry

order by total\_sales desc;

-- c. Total sales by country, state & city

select sum(Total) as Total\_Sales , i.billingcountry, i.billingstate,i.billingcity from invoice i

inner join customer c on i.CustomerId = c.CustomerId

group by i.billingcountry, i.billingstate,i.billingcity

order by Total\_Sales desc;

-- d. Total sales by customer – ranked

select cus.firstname,cus.lastname, sum(quantity\*unitprice) as Total\_sales from invoiceline invl

INNER JOIN invoice inv on invl.invoiceid = inv.invoiceid

INNER JOIN customer cus on inv.customerid = cus.customerid

group by cus.firstname,cus.lastname

order by Total\_sales desc;

-- e. Total sales by artist – ranked

select ar.name as Artist, sum(invl.quantity\*invl.unitprice) as Total\_sales from invoiceline invl

INNER JOIN track t on invl.trackid = t.trackid

INNER JOIN album a on t.albumid = a.albumid

INNER JOIN artist ar on a.artistid = ar.artistid

group by ar.name

order by Total\_sales desc;

-- f. Total sales by artist & their albums

select ar.name, a.title , sum(invl.quantity\*invl.unitprice) as Total\_sales from invoiceline invl

INNER JOIN track t on invl.trackid = t.trackid

INNER JOIN album a on t.albumid = a.albumid

INNER JOIN artist ar on a.artistid = ar.artistid

group by ar.name, a.title

order by Total\_sales desc;

-- g. Total sales by sales person (employee)

ALTER TABLE employee

ADD age INT ;

UPDATE employee SET age= YEAR(CURDATE()) - YEAR(birthdate);

ALTER TABLE employee

ADD age\_group Varchar(10);

UPDATE employee SET age\_group= '40-50' where age between 40 and 50;

UPDATE employee SET age\_group= '50-60' where age between 50 and 60;

UPDATE employee SET age\_group= '60-70' where age between 60 and 70;

UPDATE employee SET age\_group= '70-80' where age between 70 and 80;

select e.firstname,e.lastname, sum(quantity\*unitprice) as Total\_sales , count(Quantity) as Quantity, age\_group from employee e

INNER JOIN customer c on e.employeeid = c.supportrepid

INNER JOIN invoice i on i.customerid = c.customerid

INNER JOIN invoiceline on i.invoiceid = invoiceline.invoiceid

group by e.firstname,e.lastname, age\_group;

-- h. Total tracks bought and total cost by media type

select mt.name, sum(invl.quantity), sum(invl.quantity\*invl.unitprice) as Total\_cost from invoiceline invl

INNER JOIN track t on invl.trackid = t.trackid

INNER JOIN mediatype mt on t.mediatypeid = mt.mediatypeid

group by mt.name

order by Total\_cost desc;