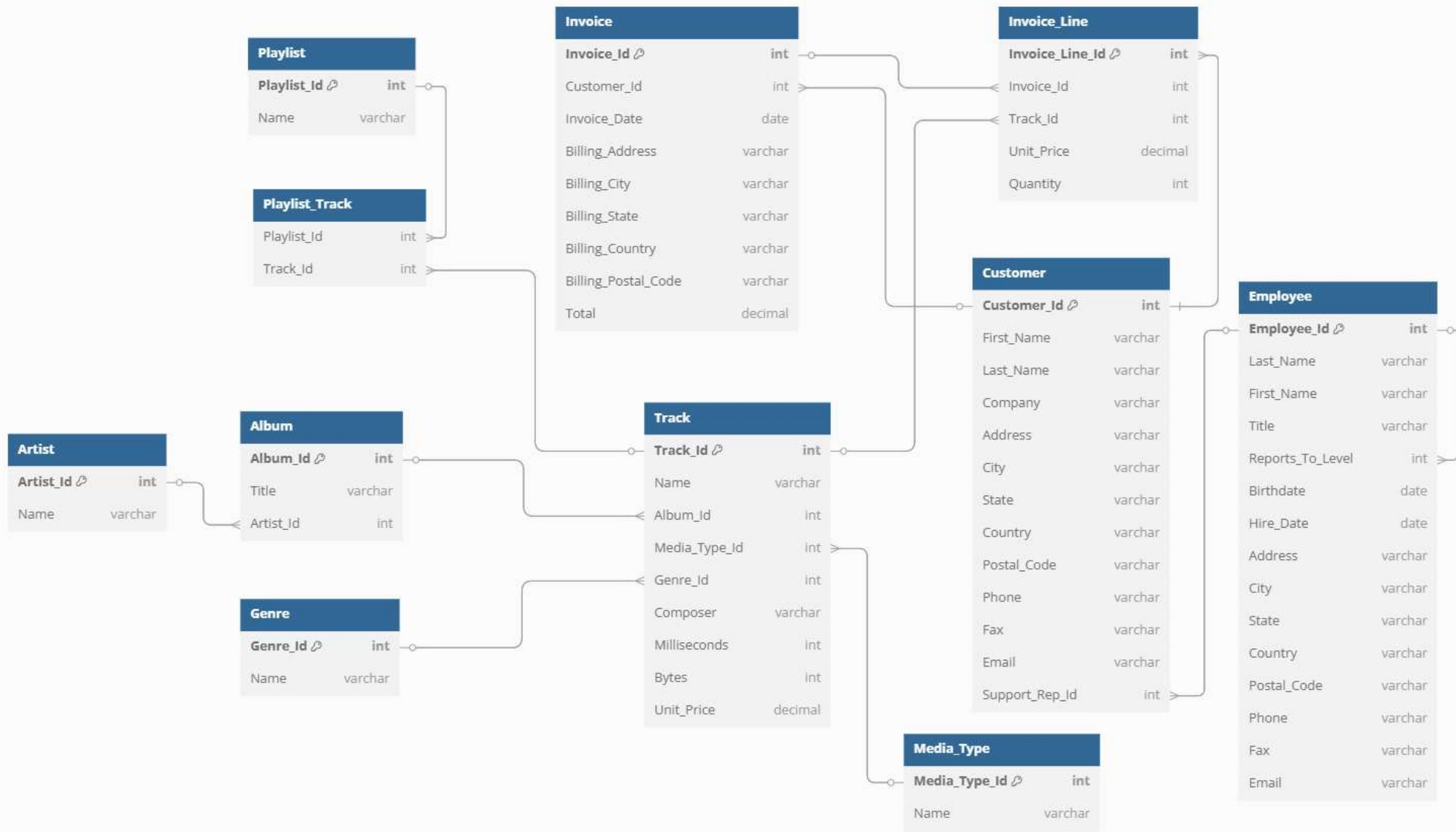


# **MUSIC STORE**

**SQL Database**





# **1. WHO IS THE SENIOR MOST EMPLOYEE BASED ON JOB TITLE?**

- `Select * From Employee`
- `Order By Level Desc`
- `Limit 1;`

## **2. WHICH COUNTRIES HAVE THE MOST INVOICES?**

- **Select Billing\_Country,**
- **Count(\*) as Total\_Invoices**
- **From Invoice**
- **Group By Billing\_Country**
- **Order By Total\_Invoices Desc;**

### **3. WHAT ARE TOP 3 VALUES OF TOTAL INVOICE?**

- **Select Total From Invoice**
- **Order By Total Desc**
- **Limit 3;**

**4. 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 Billing\_City,**
- **Sum(Total) As Invoice\_Total**
- **From Invoice**
- **Group By Billing\_City**
- **Order By Invoice\_Total Desc;**



**5. 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 Customer.Customer\_Id, Customer.Full\_Name,**
- **Sum(Invoice.Total) as Invoice\_Total**
- **From Customer**
- **Join Invoice**
- **On Customer.Customer\_Id = Invoice.Customer\_Id**
- **Group By Customer.Customer\_Id,**
- **Customer.Full\_Name**
- **Order By Invoice\_Total Desc**
- **Limit 1;**

**1. 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**
- **Customer.Email,**
- **Customer.First\_Name,**
- **Customer.Last\_Name,**
- **Genre.Name As Genre**
- **From Customer**
- **Join Invoice on Customer.Customer\_Id = Invoice.Customer\_Id**
- **Join Invoice\_Line on Invoice.Invoice\_Id = Invoice\_Line.Invoice\_Id**
- **Join Track on Invoice\_Line.Track\_Id = Track.Track\_Id**
- **Join Genre on Track.Genre\_Id = Genre.Genre\_Id**
- **Where Genre.Name = 'Rock'**
- **Order By Customer.Email Asc;**



**2. 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**
- **Artist.Name as Artist\_Name,**
- **Count(Track.Track\_Id) as Total\_Rock\_Tracks**
- **From Artist**
- **Join Album on Artist.Artist\_Id = Album.Artist\_Id**
- **Join Track on Album.Album\_Id = Track.Album\_Id**
- **Join Genre on Track.Genre\_Id = Genre.Genre\_Id**
- **Where Genre.Name = 'Rock'**
- **Group By Artist.Name**
- **Order By Total\_Rock\_Tracks Desc**
- **Limit 10;**

**3. 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 as Track\_Name,**
- **Milliseconds**
- **From Track**
- **Where Milliseconds >(**
- **Select Avg(Milliseconds) From Track**
- **)**
- **Order By Milliseconds Desc;**

**1. FIND HOW  
MUCH AMOUNT  
SPENT BY EACH  
CUSTOMER ON  
ARTISTS? WRITE  
A QUERY TO  
RETURN  
CUSTOMER  
NAME, ARTIST  
NAME AND  
TOTAL SPENT**

- Select
- Customer.Full\_Name,
- Artist.Name as Artist\_Name,
- Round(Sum(Invoice\_Line.Unit\_Price \* Invoice\_Line.Quantity),2) as Total\_Spent
- From Customer
- Join Invoice on Customer.Customer\_Id = Invoice.Customer\_Id
- Join Invoice\_Line on Invoice.Invoice\_Id = Invoice\_Line.Invoice\_Id
- Join Track on Invoice\_Line.Track\_Id = Track.Track\_Id
- Join Album on Track.Album\_Id = Album.Album\_Id
- Join Artist on Album.Artist\_Id = Artist.Artist\_Id
- Group By Customer.Full\_Name, Artist\_Name
- Order By Total\_Spent Desc;

**2. 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 Genre_Purchase_Count As (  
    Select  
        Customer.Country,  
        Genre.Name As Genre,  
        Count(*) As Total_Purchases  
    From Customer  
    Join Invoice On  
        Customer.Customer_Id =  
        Invoice.Customer_Id  
    Join Invoice_Line On  
        Invoice.Invoice_Id =  
        Invoice_Line.Invoice_Id  
    Join Track On Invoice_Line.Track_Id =  
        Track.Track_Id  
    Join Genre On Track.Genre_Id =  
        Genre.Genre_Id  
    Group By Customer.Country,  
        Genre.Name  
)
```

```
Max_Purchases_Per_Country As (  
    Select  
        Country,  
        Max(Total_Purchases) As Max_Purchases  
    From Genre_Purchase_Count  
    Group By Country  
)  
Select  
    gpc.country,  
    gpc.genre,  
    gpc.total_purchases  
From Genre_Purchase_Count gpc  
Join Max_Purchases_Per_Country mpc  
    On gpc.country = mpc.country And  
    gpc.total_purchases = mpc.max_purchases  
Order By gpc.country Asc, gpc.genre Asc;
```



**3. 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_Total_Spent As (  
    Select  
        Customer.Country,  
        Customer.Customer_Id,  
        Customer.Full_Name,  
        Round(Sum(Invoice.Total), 2) As  
Total_Spent  
    From Customer  
    Join Invoice On Customer.Customer_Id =  
Invoice.Customer_Id  
    Group By Customer.Country,  
Customer.Customer_Id,  
Customer.Full_Name  
)  
Max_Spent_Per_Country As (  
    Select  
        Customer.Country,  
        Customer.Customer_Id,  
        Customer.Full_Name,  
        Round(Sum(Invoice.Total), 2) As  
Total_Spent  
    From Customer  
    Join Invoice On Customer.Customer_Id =  
Invoice.Customer_Id  
    Group By Customer.Country,  
Customer.Customer_Id,  
Customer.Full_Name  
)
```

```
Select  
    Country,  
    Max(Total_Spent) As Max_Spent  
From Customer_Total_Spent  
Group By Country  
)  
Select  
    cts.country,  
    cts.full_name,  
    cts.total_spent  
From Customer_Total_Spent cts  
Join Max_Spent_Per_Country mspc  
    On cts.country = mspc.country And  
cts.total_spent = mspc.max_spent  
Order By cts.country Asc, cts.full_name  
Asc;
```