### **SQL project**

**1. Top 15 best customers, based on invoice sum  
  
  
Description:**   
  
This result shows a list of top 15 customers and their invoice sum. The data is ordered by invoice total sum from highest to lowest value.   
  
Based on total invoice sum we can identify our most active customers and their maximum purchasing ability of our service.

SQL  
  
SELECT Customer.CustomerId, Customer.FirstName || ' '|| Customer.LastName, sum(total)

FROM Invoice

JOIN Customer

ON Invoice.CustomerId = Customer.CustomerId

GROUP BY Customer.CustomerId

ORDER BY sum(total) DESC

LIMIT 15

**2. Display top 30 rock music listeners and order them by invoice line amount**

**Description:**   
  
This result shows the list of top 30 Rock music listeners, clients are ordered by invoice line amount.

SQL  
  
SELECT DISTINCT(Email), FirstName || ' '|| LastName AS fullname, Genre.Name, count (InvoiceLine.InvoiceId) AS Invoice\_lines

FROM Customer

JOIN Invoice

ON Invoice.CustomerId = Customer.CustomerId

JOIN InvoiceLine

ON InvoiceLine.InvoiceId = Invoice.InvoiceId

JOIN Track

ON InvoiceLine.TrackId = Track.TrackId

JOIN Genre

ON Track.GenreId = Genre.GenreId

WHERE Genre.Name = 'Rock'

GROUP BY Email

ORDER BY 4 DESC  
LIMIT 30;

**3. Show top 20 Rock artists, based on number of tracks.**

**Order by number of tracks (DESC)**

**Description:**   
  
Displaying the list of top 20 rock artists and number of their tracks.

SQL  
  
SELECT Artist.ArtistId, Artist.Name, count(TrackId) AS Songs

FROM Track

JOIN Genre

ON Track.GenreId = Genre.GenreId

JOIN Album

ON Track.AlbumId = Album.AlbumId

JOIN Artist

ON Album.ArtistId = Artist.ArtistId

WHERE Genre.Name = 'Rock'

GROUP BY Artist.Name

ORDER BY Songs DESC

LIMIT 10;

**4. Top 15 of artist, who has earned the most according to InvoiceLines.  
  
  
Description:**   
  
Displaying the list of top 20 rock artists and number of their tracks.

SQL  
  
SELECT Artist.Name, Artist.ArtistId AS CustomerID, sum (InvoiceLine.Quantity\* InvoiceLine.UnitPrice) AS AmountSpent

FROM Artist

JOIN Album

ON Artist.ArtistId= Album.ArtistId

JOIN Track

ON Track.AlbumId= Album.AlbumId

JOIN InvoiceLine

ON InvoiceLine.TrackId= Track.TrackId

JOIN Invoice

ON Invoice.InvoiceId = InvoiceLine.InvoiceId

GROUP BY Artist.Name

ORDER BY 3 DESC

LIMIT 15;