**TASK 1**

**--------**Write a query that returns each genre, with the number of tracks sold in the USA in absolute Numbers & Percentage--------

**SELECT Genre\_Name, Number\_of\_Tracks\_Sold, ROUND (Number\_of\_Tracks\_Sold\*100/**

**(SELECT SUM(Number\_of\_Tracks\_Sold)**

**FROM (SELECT CG.Genre\_Name, COUNT(CT.Track\_Id) AS Number\_of\_Tracks\_Sold**

**FROM Chinook.Genre AS CG**

**JOIN Chinook.Track AS CT ON CG.Genre\_Id = CT.Genre\_Id**

**JOIN Chinook.Invoice\_Line AS CIL ON CT.Track\_Id = CIL.Track\_Id**

**JOIN Chinook.Invoice AS CI ON CI.Invoice\_Id = CIL.Invoice\_id**

**WHERE CI.Billing\_Country ILIKE 'USA'**

**GROUP BY 1**

**ORDER BY 2 DESC) SUB2))**

**FROM(**

**SELECT CG.Genre\_Name, COUNT(CT.Track\_Id) AS Number\_of\_Tracks\_Sold**

**FROM Chinook.Genre AS CG**

**INNER JOIN Chinook.Track AS CT ON CG.Genre\_Id = CT.Genre\_Id**

**INNER JOIN Chinook.Invoice\_Line AS CIL ON CT.Track\_Id = CIL.Track\_Id**

**INNER JOIN Chinook.Invoice AS CI ON CI.Invoice\_Id = CIL.Invoice\_id**

**WHERE CI.Billing\_Country ILIKE 'USA'**

**GROUP BY 1**

**ORDER BY 2 DESC) SUB1;**

**--------QUERY 2---------**

**SELECT CI.Billing\_Country, CG.Genre\_Name, SUM(CI.Total) AS Total\_Sales**

**From Chinook.Genre AS CG**

**INNER JOIN Chinook.Track AS CT ON CG.Genre\_Id = CT.Genre\_Id**

**INNER JOIN Chinook.Invoice\_Line AS CIL ON CT.Track\_Id = CIL.Track\_Id**

**INNER JOIN Chinook.Invoice AS CI ON CI.Invoice\_Id = CIL.Invoice\_Id**

**INNER JOIN Chinook.Album AS CAL ON CAL.Album\_Id = CT.Album\_Id**

**INNER JOIN Chinook.Artist AS CAR ON CAR.Artist\_Id = CAL.Artist\_Id**

**WHERE CI.Billing\_Country = 'USA' AND (CG.GENRE\_Name LIKE '%Punk%'**

**OR CG.GENRE\_Name like 'Pop'**

**OR CG.GENRE\_Name LIKE 'Hip Hop%'**

**OR CG.GENRE\_Name LIKE 'Blues')**

**GROUP BY 1,2**

**ORDER BY 3 DESC;**

**TASK 2**

**--------QUERY 1---------**

**SELECT CE.First\_Name,CE.Last\_Name,CE.Title, CE.Hire\_date,CE.City, SUM(CI.Total) AS Total\_Sales**

**From Chinook.Employee AS CE**

**INNER JOIN Chinook.Customer AS CC ON CE.Employee\_Id = CC.Support\_repid**

**INNER JOIN Chinook.Invoice AS CI ON CC.Customer\_Id = CI.Customer\_Id**

**GROUP BY 1,2,3,4,5**

**ORDER BY 6 DESC;**

**--------QUERY 3A---------(SINCE THEY ASKED FROM THE SALES TABLE)**

**SELECT CC.Country, COUNT(DISTINCT(CI.customer\_id))**

**FROM Chinook.Customer AS CC**

**JOIN Chinook.Invoice AS CI ON CC.Customer\_id = CI.Customer\_id**

**GROUP BY 1**

**ORDER BY 2 DESC;**

**--------QUERY 3B---------**

**SELECT CC.Country, COUNT(CC.Customer\_Id)AS Total\_Number\_of\_Customers, SUM(CI.Total) AS Total\_Value\_Of\_Sales**

**FROM Chinook.Customer AS CC**

**JOIN Chinook.Invoice AS CI ON CC.Customer\_id = CI.Customer\_id**

**GROUP BY 1**

**ORDER BY 2 DESC;**

**--------QUERY 3C---------**

**SELECT CC.Country, COUNT(DISTINCT(CI.Customer\_Id))AS Total\_Number\_of\_Customers, SUM(CI.Total) AS Total\_Value\_Of\_Sales, SUM(CI.Total)/COUNT(DISTINCT(CI.Customer\_Id)) AS Average\_Sales\_Per\_Customer**

**FROM Chinook.Customer AS CC**

**JOIN Chinook.Invoice AS CI ON CC.Customer\_id = CI.Customer\_id**

**GROUP BY 1**

**ORDER BY 2 DESC;**

**--------QUERY 3D---------**

**SELECT CC.Country, COUNT(DISTINCT(CI.Customer\_Id))AS Total\_Number\_of\_Customers, SUM(CIL.quantity)/COUNT(DISTINCT(CI.Customer\_Id)) AS Average\_Order\_Per\_Customer**

**FROM Chinook.Customer AS CC**

**JOIN Chinook.Invoice AS CI ON CC.Customer\_id = CI.Customer\_id**

**JOIN Chinook.Invoice\_line AS CIL ON CI.Invoice\_id = CIL.Invoice\_id**

**GROUP BY 1**

**ORDER BY 3 ASC;**

**TASK 3**

**--------QUERY 3D---------(A where clause is missing)**

**SELECT CI.Invoice\_Id,CAL.Album\_Id,CAL.Album\_Title, COUNT(CT.Track\_Id) As Number\_Of\_Tracks\_In\_The\_Album**

**FROM Chinook.Album AS CAL**

**JOIN Chinook.Track AS CT ON CAL.Album\_Id = CT.Album\_Id**

**JOIN Chinook.Invoice\_Line AS CIL ON CT.Track\_Id = CIL.Track\_Id**

**JOIN Chinook.Invoice AS CI ON CI.Invoice\_Id = CIL.Invoice\_Id**

**GROUP BY 1,2,3**

**ORDER BY 4 DESC**

**-------Number of tracks In each Album--------**

**SELECT CAL.Album\_Id,CAL.Album\_Title, COUNT(CT.Track\_Id) As Number\_Of\_Tracks\_In\_The\_Album**

**FROM Chinook.Album AS CAL**

**JOIN Chinook.Track AS CT ON CAL.Album\_Id = CT.Album\_Id**

**GROUP BY 1,2**

**ORDER BY 3 DESC**

1. **follower | followee**

**user1 | user2**

**user2 | user3**

**user2 | user1**

1. **Create a list with 5 nest [[[[[]]]]]**
2. **Add ten elements to the last nest**
3. **Reference the 8th and 10th elements of the last nest.**

**select f1.user1 as follower, f2.user1 as followee,** COUNT(DISTINCT f1.user2) as Mutual

**from follow as f**

**join follow f1 on f1. User2 = f. user1**

**join follow f2 on f2. User2= f. user1**

**group by 1,2;**