## Query 1

SELECT Customer.LastName, Customer.FirstName, Customer.Email,

Genre. Name AS Name,

SUM(Track.Milliseconds/60000) AS Total time played min

FROM Customer

JOIN Invoice

ON Customer.CustomerId = Invoice.CustomerId

JOIN InvoiceLine

ON Invoice.InvoiceId = InvoiceLine.InvoiceId

JOIN Track

ON InvoiceLine.TrackId = Track.TrackId

JOIN Genre

ON Track.GenreId = Genre.GenreId

WHERE Genre.Name = "Jazz"

GROUP BY Customer.LastName, Customer.FirstName, Customer.Email

ORDER BY Total\_time\_played\_min DESC;

## Query 2

 $SELECT\ Artist. Name,\ SUM (Invoice Line. Unit Price)*(Invoice Line. Quantity)\ AS\ amount\_spent,$ 

CASE WHEN SUM(InvoiceLine.UnitPrice)\*(InvoiceLine.Quantity) >= 100 THEN 'top earner'

WHEN SUM(InvoiceLine.UnitPrice)\*(InvoiceLine.Quantity) >= 50 AND

SUM(InvoiceLine.UnitPrice)\*(InvoiceLine.Quantity) < 100 THEN 'middle earner'

ELSE 'low earner' END AS artist earning level

FROM Artist

JOIN Album

ON Artist.ArtistId = Album.ArtistId

JOIN Track

ON Album.AlbumId = Track.AlbumId

JOIN InvoiceLine

ON Track.TrackId = InvoiceLine.TrackId

JOIN Invoice

ON InvoiceLine.InvoiceId = Invoice.InvoiceId

JOIN Customer

ON Invoice.CustomerId = Customer.CustomerId

GROUP BY Artist.Name

ORDER BY amount spent DESC;

## Query 3

SELECT Artist.Name AS Artist Name, Track.AlbumId AS Album id, Album.Title AS

Artist Album Title,

COUNT(\*) AS Num Album Songs,

AVG(Track.Milliseconds) AS Avg Song Length Of Album,

MIN(Track.Milliseconds) AS Shortest Song Length

FROM Artist

JOIN Album

ON Artist.ArtistId = Album.ArtistId

JOIN Track

ON Album.AlbumId = Track.AlbumId

WHERE Artist.Name = "Led Zeppelin" AND Album.Title IN ("Led Zeppelin II","Led Zeppelin III","Led Zeppelin III","IV","Houses Of The Holy")

GROUP BY Artist Name, Artist Album Title, Album id

HAVING AVG(Track.Milliseconds) >= 190000 AND MIN(Track.Milliseconds) > 60000

ORDER BY Avg Song Length Of Album

## Query 4

SELECT STRFTIME('%Y-%m', Invoice.InvoiceDate) AS ord date,

Customer.FirstName, Customer.LastName, Customer.Country,

SUM(Invoice.Total) AS amount spent

FROM Customer

JOIN Invoice

ON CustomerId = Invoice.CustomerId

GROUP BY ord date, Customer.FirstName, Customer.LastName, Customer.Country

ORDER BY ord date DESC, amount spent DESC

LIMIT 5;