

Course Title: Data Modeling and Normalization with MySQL

Date: 07 August 2020

In-class Exam (15%)

Mark: 15

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ALL questions are based on 'Chinook' database. Please provide your SQL as text below each question.

1. List 'Name', 'Composer' from 'Track' relation along with their corresponding Album 'Title' and Genre. [Hint: join of Genre, Album and Track] (4)

```
use chinook;
select t.Name, t.Composer, a.Title, g.Name from Track t
join Album a ON t.AlbumId = a.AlbumId
join Genre g ON t.GenreId = g.GenreId;
```

2. Find the artist name who has most number of tracks presents in 'Track' [Hint join of Artist, Album, Track] (4)

```
select ar.Name, count(ar.Name) from Artist ar
join Album a ON a.ArtistId = ar.ArtistId
join Track t ON t.AlbumId = a.AlbumId
Group By ar.Name
Order By count(ar.Name) desc
Limit 1;
```

3. List all the track name which are not sold yet? And How many of them are present? [Hint: Join and count](3)

- a) List all the track name which are not sold yet

```
select Track.TrackId, Track.Name from Track where Track.TrackId Not In
(select t.TrackId from Track t
inner join InvoiceLine il ON t.TrackId = il.TrackId
inner join Invoice i ON il.InvoiceId = i.InvoiceId
Group By t.TrackId);
```

- b) How many of them are present? (From this question, I understand that you are asking count of the tracks that are not sold)

```
select count(Track.TrackId) from Track where Track.TrackId Not In
(select t.TrackId from Track t
inner join InvoiceLine il ON t.TrackId = il.TrackId
inner join Invoice i ON il.InvoiceId = i.InvoiceId
Group By t.TrackId);
```

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4. List total sales by genre_name? And find out which Genre made highest sales overall? Result should be 'Rock' which made total sales amount 826.66. (5) [Hint: Join of track, genre and InvoiceLine]

```
select g.GenreId, g.Name, sum(il.UnitPrice*il.Quantity) as TotalSales
from InvoiceLine il
inner join Track t ON il.TrackId = t.TrackId
inner join Genre g ON t.GenreId = g.GenreId
Group By g.GenreId
Order By TotalSales Desc
Limit 1;
```