SQL Project Q&A

Beginner Level Questions

Q1. Senior most employee based on job title

Name :- Madan Mohan
Job title:- Senior General Manager

Q2. Which contries have most Invoices

Top 3 Contries
1. USA - 131
2. Canada - 76
3. Brazil - 61

Q3. What are the Top 3 values of total invoices
1. 23.759999999999998
2. 19.8
3. 19.8

Q4. Which City has the best customers. Return both city name and Invoice total

1. PRAGUE - 273.24

Q5. Which is the best customer

1. R. Madhav - $144.54 worth of orders

Moderate level Questions

Q1. Only Rock music listeners and their details alphabetical wise.

SELECT c.customer_id, c.email AS em, c.first_name, c.last_name, gn.name AS GENRE_name
FROM customer AS c
JOIN invoice AS i
ON c.customer_id = i.customer_id
JOIN invoice_line AS inv
ON i.invoice_id = inv.invoice_id
JOIN track AS tr
ON inv.track_id = tr.track_id
JOIN genre AS gn
ON tr.genre_id = gn.genre_id
WHERE gn.name = 'Rock'
ORDER BY em asc

Customer ID	Customer Email	First Name	Last name	Genre
32	aaronmitchell@yahoo.ca	Aaron	Mitchell	Rock
11	alero@uol.com.br	Alexandre	Rocha	Rock
7	astrid.gruber@apple.at	Astrid	Gruber	Rock
4	bjorn.hansen@yahoo.no	Bjørn	Hansen	Rock
39	camille.bernard@yahoo.fr	Camille	Bernard	Rock
8	daan_peeters@apple.be	Daan	Peeters	Rock
56	diego.gutierrez@yahoo.ar	Diego	Gutiérrez	Rock

Q2. Top Ten Artists who have Written the most Rock Music.

OUTPUT:

Artist/Band Name	No. Of Songs
Led Zeppelin	114
U2	112
Deep Purple	92
Iron Maiden	81
Pearl Jam	54
Van Halen	52
Queen	45
The Rolling Stones	41
Creedence Clearwater Revival	40
Kiss	35

Q3. Select songs whose length is greater than the Average song length, and arrange them with longest song being at top.

Song Name	Song Length (In Minutes)
Occupation / Precipice	88.11588333
Through a Looking Glass	84.81396667
Greetings from Earth, Pt. 1	49.33821667
The Man With Nine Lives	49.2833
Battlestar Galactica, Pt. 2	49.26801667

ADVANCED SQL QUESTIONS

Q1. Find Amount Spent by each customer artist wise.

SELECT first_name,last_name, ar.nameASArtist_Name,SUM(inv.unit_price* inv.quantity)
AS PRICE
FROM customer AS c
JOIN invoice AS i
ON c.customer_id = i.customer_id
JOIN invoice_line AS inv
ON i.invoice_id = inv.invoice_id
JOIN track AS tr
ON inv.track_id = tr.track_id
JOIN album AS alb
ON tr.album_id = alb.album_id
JOIN artist AS ar
ON alb.artist_id = ar.artist_id
GROUP BY 1, 2, 3
ORDER BY PRICE desc

 OUTPUT :
 TOP5

First Name	Last Name	Artist/Band Name	Sales
Hugh	O'Reilly	Queen	27.719
Wyatt	Girard	Frank Sinatra	23.759
Aaron	Mitchell	James Brown	19.799
François	Tremblay	The Who	19.799
Robert	Brown	Creedence Clearwater Revival	19.799

Q2. Show the Countrywise best selling Genre

USING A CTE AND ROW_NUMBER FUNCTION

```
WITH popular_genre AS
(
    SELECT country, g.name AS GENRE_NAME, count(inv.quantity) AS Sales,
     ROW_NUMBER() OVER(PARTITION BY country ORDER BY count(inv.quantity)
desc) AS ROWNO
    FROM customer c
    JOIN invoice i
    ON c.customer_id = i.customer_id
    JOIN invoice_line inv
    ON i.invoice_id = inv.invoice_id
    JOIN  track tr
    ON inv.track_id = tr.track_id
    JOIN genre g
    ON tr.genre_id = g.genre_id
    GROUP BY 1,2
    ORDER BY 1 ASC, Sales desc
)


SELECT country, genre_name, sales FROM popular_genre
WHERE ROWNO <=  1
```

Country	Genre name	Sales
Argentina	Alternative & Punk	17
Australia	Rock	34
Austria	Rock	40
Belgium	Rock	26
Brazil	Rock	205
Canada	Rock	333
Chile	Rock	61
Czech Republic	Rock	143
Denmark	Rock	24
Finland	Rock	46

Q3. Find Out the customer with the most purchases from each country.

```
WITH best_customers AS
(
   SELECT first_name, last_name, country, SUM(unit_price*quantity) AS SALES,
        ROW_NUMBER()    OVER(PARTITION    BY    country    ORDER    BY
SUM(unit_price*quantity) desc) AS ROWNO
   FROM customer c
   JOIN invoice i
   ON c.customer_id = i.customer_id
   JOIN invoice_line inv
   ON i.invoice_id = inv.invoice_id

   GROUP BY 1,2,3
   ORDER BY 3 ASC, SALES desc)
```

SELECT first_name, last_name, country, sales FROM best_customers
WHERE ROWNO <= 1

OUTPUT:
TOP 10

First Name	Last Name	Country	Sales
Diego	Gutiérrez	Argentina	39.59
Mark	Taylor	Australia	81.17
Astrid	Gruber	Austria	69.30
Daan	Peeters	Belgium	60.39
Luís	Gonçalves	Brazil	108.89
François	Tremblay	Canada	99.98
Luis	Rojas	Chile	97.01
R	Madhav	Czech Republic	144.53
Kara	Nielsen	Denmark	37.61
Terhi	Hämäläinen	Finland	79.19