

## **Music Store Analysis using SQL**

**Task 1:** Who is the senior most employee based on job title?

**Query:**

```
SELECT * FROM EMPLOYEE  
ORDER BY LEVELS DESC  
LIMIT 1;
```

**Task 2:** Which countries have the most Invoices?

**Query:**

```
SELECT BILLING_COUNTRY, COUNT(*) AS MOST_INVOICE FROM INVOICE  
GROUP BY BILLING_COUNTRY  
ORDER BY MOST_INVOICE DESC  
LIMIT 1;
```

**Task 3:** What are top 3 values of total invoice?

**Query:**

```
SELECT * FROM INVOICE  
ORDER BY TOTAL DESC  
LIMIT 3;
```

**Task 4:** Which city has the best customers? We would like to throw a promotional Music Festival in the city we made the most money. Write a query that returns one city that has the highest sum of invoice totals. Return both the city name & sum of all invoice totals.

**Query:**

```
SELECT BILLING_CITY, SUM(TOTAL) AS INVOICE_TOTAL FROM INVOICE  
GROUP BY BILLING_CITY  
ORDER BY INVOICE_TOTAL DESC;
```

**Task 5:** Who is the best customer? The customer who has spent the most money will be declared the best customer. Write a query that returns the person who has spent the most money.

**Query:**

```
SELECT CUSTOMER.CUSTOMER_ID, CUSTOMER.FIRST_NAME,  
CUSTOMER.LAST_NAME, SUM(INVOICE.TOTAL) AS TOTAL FROM CUSTOMER  
JOIN INVOICE ON CUSTOMER.CUSTOMER_ID = INVOICE.CUSTOMER_ID  
GROUP BY CUSTOMER.CUSTOMER_ID  
ORDER BY TOTAL DESC LIMIT 1;
```

**Task 6:** Write query to return the email, first name, last name, & Genre of all Rock Music listeners. Return your list ordered alphabetically by email.

**Query:**

```
SELECT DISTINCT EMAIL, FIRST_NAME, LAST_NAME  
FROM CUSTOMER  
JOIN INVOICE ON CUSTOMER.CUSTOMER_ID = INVOICE.CUSTOMER_ID  
JOIN INVOICE_LINE ON INVOICE.INVOICE_ID = INVOICE_LINE.INVOICE_ID  
JOIN TRACK ON INVOICE_LINE.TRACK_ID = TRACK.TRACK_ID  
JOIN GENRE ON TRACK.GENRE_ID = GENRE.GENRE_ID  
WHERE GENRE.NAME='Rock'  
ORDER BY EMAIL;
```

**Task 7:** Let's invite the artists who have written the most rock music in our dataset. Write a query that returns the Artist name and total track count of the top 10 rock bands.

**Query:**

```
SELECT ARTIST.NAME, COUNT(*) AS TRACK_COUNT FROM ARTIST  
JOIN ALBUM ON ARTIST.ARTIST_ID = ALBUM.ARTIST_ID  
JOIN TRACK ON ALBUM.ALBUM_ID = TRACK.ALBUM_ID  
JOIN GENRE ON TRACK.GENRE_ID = GENRE.GENRE_ID  
WHERE GENRE.NAME='Rock'  
GROUP BY ARTIST.NAME  
ORDER BY TRACK_COUNT DESC LIMIT 5;
```

**Task 8:** Return all the track names that have a song length longer than the average song length. Return the Name and Milliseconds for each track. Order by the song length with the longest songs listed first.

**Query:**

```
SELECT NAME, MILLISECONDS FROM TRACK
WHERE MILLISECONDS >
(SELECT AVG(MILLISECONDS) AS AVG_TRACK_LENGTH FROM TRACK)
ORDER BY MILLISECONDS DESC;
```