

SQL Project

**data analytics project on
music store**





Objective

This project is for beginners and will teach us how to analyze the music playlist database. we can examine the dataset with SQL and help the store understand its business growth by answering simple questions

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who is the senior most employee based on job title

```
SELECT *  
FROM employee  
ORDER BY levels DESC  
LIMIT 1;
```



WHICH COUNTRIES HAVE THE MOST INVOICE



```
SELECT
    COUNT(*) AS count_invoice, billing_country
FROM
    invoice
GROUP BY billing_country
ORDER BY count_invoice DESC;
```

WHAT ARE TOP 3 VALUES OF TOTAL INVOICE

```
SELECT  
    total  
FROM  
    invoice  
ORDER BY total DESC  
LIMIT 3;
```



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.

```
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 , customer.first_name , customer.last_name  
ORDER BY total DESC  
LIMIT 1;
```



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 HIGEST SUM OF INVOICE TOTAL. RETURN BOTH THE CITY NAME AND SUM OF ALL INVOICE TOTALS

```
SELECT  
    SUM(total) AS invoice_total, billing_city  
FROM  
    invoice  
GROUP BY billing_city  
ORDER BY invoice_total DESC
```

WRITE QUERY TO RETURN THE EMAIL, FIRST NAME , LAST NAME AND
GENRE OF ALL ROCK MUSIC LISTENERS.
RETURN YOUR LIST ORDERED ALPHABETIALLY BY EMAIL STARTING
WITH A

```
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
WHERE
    track_id IN (SELECT
        track_id
    FROM
        track
        JOIN
        genre ON track.genre_id = genre.genre_id
    WHERE
        genre.name LIKE 'rock')
ORDER BY email;
```

LET'S INVITE THE ARTISTS WHO HAVE WRITTEN THE MOST ROCK MUSIC IN OUR DATABASE.

WRITE A QUERY THAT RETURN THE ARTIST NAME AND TOTAL TRACK COUNT OF THE TOP 10 ROCK BANDS

```
SELECT  
    artist.artist_id,  
    artist.name,  
    COUNT(artist.artist_id) AS number_of_songs  
FROM  
    track  
        JOIN  
    album2 ON album2.album_id = track.album_id  
        JOIN  
    artist ON artist.artist_id = album2.artist_id  
        JOIN  
    genre ON genre.genre_id = track.genre_id  
WHERE  
    genre.name LIKE 'rock'  
GROUP BY artist.artist_id  
ORDER BY number_of_songs DESC  
LIMIT 10;
```

return all the track names that have a song length longer than the avg song length. return the name and millisecond for each track

order by the song length with the longest songs listed first

```
SELECT
    name, milliseconds
FROM
    track
WHERE
    milliseconds > (SELECT
        AVG(milliseconds) AS avg_track_length
    FROM
        track)
ORDER BY milliseconds DESC;
```