# 🎵 Music Store Data Analysis – SQL Portfolio Project

This project explores a fictional digital music store database using SQL. The objective is to derive business insights from customer behavior, music genre preferences, and revenue trends using structured SQL queries.

## 🔬 Project Overview

The dataset simulates a music store’s operations with tables such as:

* customer (customer details)
* invoice & invoice\_line (purchase and item details)
* track, album, artist (music catalog)
* employee (staff hierarchy)
* genre (music classification)

## 💡 Key Questions Answered

### ✅ Easy

1. Who is the senior most employee based on job title?
2. Which countries have the most invoices?
3. What are the top 3 invoice totals?
4. Which city has the highest total invoice value?
5. Who is the customer who has spent the most?

### 💠 Moderate

1. Who are the Rock music listeners (email, name, genre)?
2. Top 10 Rock artists by number of tracks
3. Tracks longer than average length (with duration)

### 📈 Advanced

1. How much has each customer spent on the best-selling artist?
2. What is the most popular genre in each country?
3. Top customer by total spend per country (supporting ties)

## 💪 Skills & Tools Used

* **SQL Joins**: INNER JOIN, LEFT JOIN
* **Aggregation**: SUM(), COUNT(), AVG()
* **Window Functions**: RANK(), ROW\_NUMBER()
* **Subqueries & CTEs**
* **Filtering & Sorting**
* PostgreSQL / SQLite compatible

## 📊 Sample Output

| Country | Genre | Purchases |
| --- | --- | --- |
| USA | Rock | 43 |
| Germany | Jazz | 30 |
| Germany | Metal | 30 |

## 📂 Repository Structure

Music-Store-Data-Analysis/  
├── README.md # Project overview  
├── SQL/  
│ └── music\_store\_analysis.sql  
├── Excel\_Output/  
│ └── results.xlsx  
├── Visuals/  
│ └── genre\_by\_country\_chart.png