Overview:

This project involves analyzing a Spotify dataset with various attributes about tracks, albums, and artists using **SQL**. It covers an end-to-end process of normalizing a denormalized dataset, performing SQL queries of varying complexity (easy, medium, and advanced), and optimizing query performance. The primary goals of the project are to practice advanced SQL skills and generate valuable insights from the dataset.

Project Steps:

Data Exploration

Before diving into SQL, it's important to understand the dataset thoroughly. The dataset contains attributes such as:

- Artist: The performer of the track.
- Track: The name of the song.
- Album: The album to which the track belongs.
- Album type: The type of album e.g: single or album.
- Various metrics such as danceability, energy, loudness, tempo, and more.

- **Querying the Data**

- After the data is inserted, various SQL queries can be written to explore and analyze the data. Queries are categorized into **easy**, **medium**, and **advanced** levels to help progressively develop SQL proficiency.

Easy Queries

- Simple data retrieval, filtering, and basic aggregations.

Medium Queries

- More complex queries involving grouping, aggregation functions, and joins.

Advanced Queries

- Subqueries, Window functions, CTEs,

Technology Stack

- **Database**: PostgreSQL
- **SQL Queries**: DDL, DML, Aggregations, Joins, Subqueries, Window Functions

- **Tools**: pgAdmin 4

License

- This project is licensed under the MIT License.