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Date:09/11/2025

This project was created to practice and understand different SQL concepts through step-by-step goals.
Each goal includes queries related to selecting, filtering, joining, grouping, and managing data in a database.
It also covers advanced topics like stored procedures, triggers, indexes, and transactions.
The main aim of this work was to get hands-on experience with SQL queries and learn how to use them effectively for data handling.

Goal	Project	Status
1.	Create the Database Schema	Completed
2.	Populate with Realistic Sample Data	Completed
3.	Basic Information Retrieval Queries	Completed
4.	Statistical Summaries and Aggregation	Completed
5.	Multi-Table Joins and Analysis	Completed
6.	Subqueries and Common Table Expressions	Completed
7.	Set Operations and Combined Results	Completed
8.	Window Functions for Ranking and Analytics	Completed
9,	Create Stored Procedures and Functions (BONUS)	Completed
10.	Implement Triggers for Data Integrity (BONUS)	Completed
11.	Optimize Query Performance (BONUS)	Completed
12.	Transaction Management (BONUS)	Completed

Challenges:-

- Remembering the correct syntax for complex queries.
- Understanding the difference between Different types of JOIN.
- Handling syntax errors.
- Handling transaction rollback properly.

Solutions:-

- Practiced each concept using simple examples first.
- Reviewed MySQL documentation for clarity.
- Debugged and tested each query step by step.

Key Learning:-

- How to create and execute SQL queries confidently.
- Improved logical thinking and problem-solving using SQL.
- How to organize and manage data efficiently in a database.
- How indexes can speed up data retrieval.
- The importance of triggers and transactions in real projects.