

NAME: Daryl D. Silva BSCpE – 2 B2

Laboratory Activity 1:

Laboratory Title: Installing MySQL and Setting Up the Database

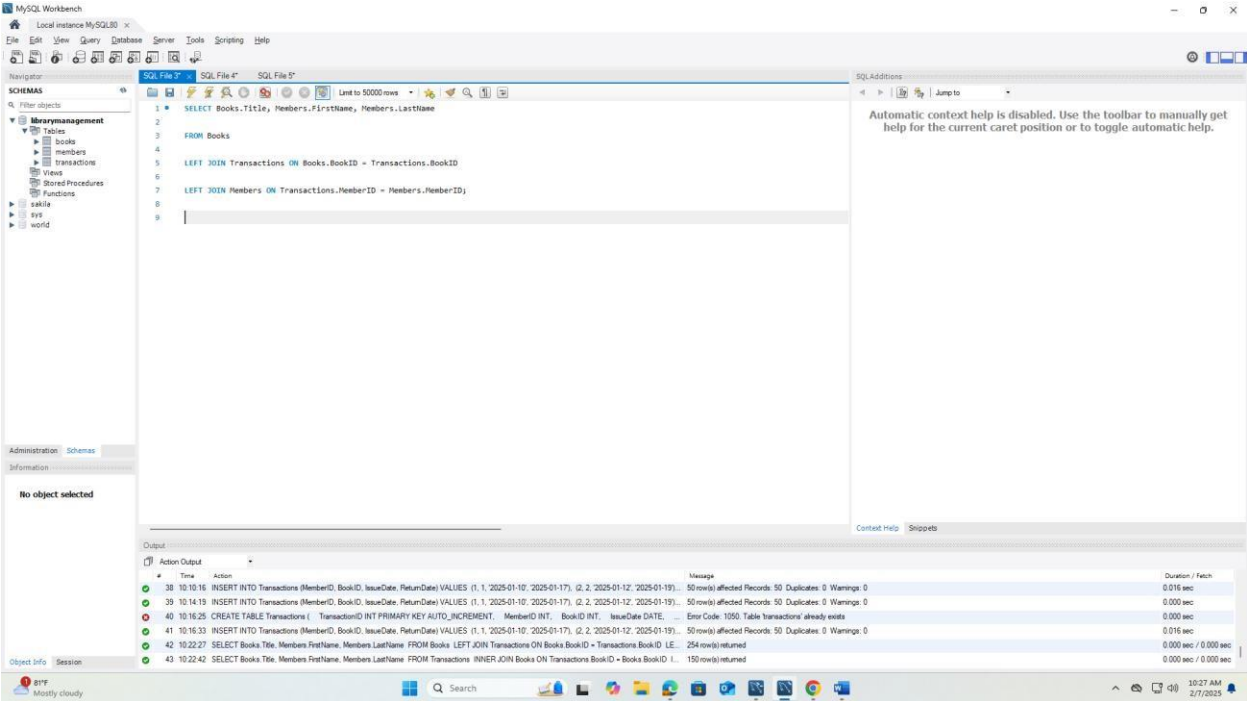
Chapter No. and Topic: Chapter 1 - Relational Database Concepts

Discussions:

This activity will guide students through installing MySQL on their system and setting up a basic library management system database.

Result:

A running MySQL instance with a database called LibraryManagement.



Additional Questions/Discussions:

1. Why is MySQL popular for DBMS?

MySQL is widely used because it is an open-source relational database management system (RDBMS) that is both free and highly efficient. It offers strong data security, fast query performance, and the ability to handle large volumes of data. Its scalability ensures it can grow with business needs, and its ease of use makes it accessible to developers. Additionally, MySQL supports a wide variety of programming languages, making it versatile for different applications.

2. What are the advantages of using MySQL for a library management system?

Using MySQL in a library management system simplifies data organization by automatically storing and retrieving records of books, members, and transactions. This reduces the time spent on manual tasks, such as record-keeping and searching for books, improving overall operational efficiency. The system's ease of use means that librarians can quickly adopt and manage it, while students benefit from quick access to library resources. Furthermore, MySQL ensures data integrity and security, making it a reliable choice for managing sensitive information.

Conclusions:

Laboratory Activity 1 focused on installing MySQL and setting up a database, providing a foundational understanding of relational database concepts. By completing this activity, students gained hands-on experience with MySQL installation and configuration, reinforcing key principles of database management. This exercise highlighted the importance of setting up a functional database environment to work with relational data effectively.