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BSCpE-2A

Chapter 1: Relational Database Concepts

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.

Activity Description:

Install MySQL, create a new database, and establish connections using MySQL Workbench or command line.

Objectives:

Install MySQL on a local machine.

Set up a MySQL database for the Library Management System.

Materials:

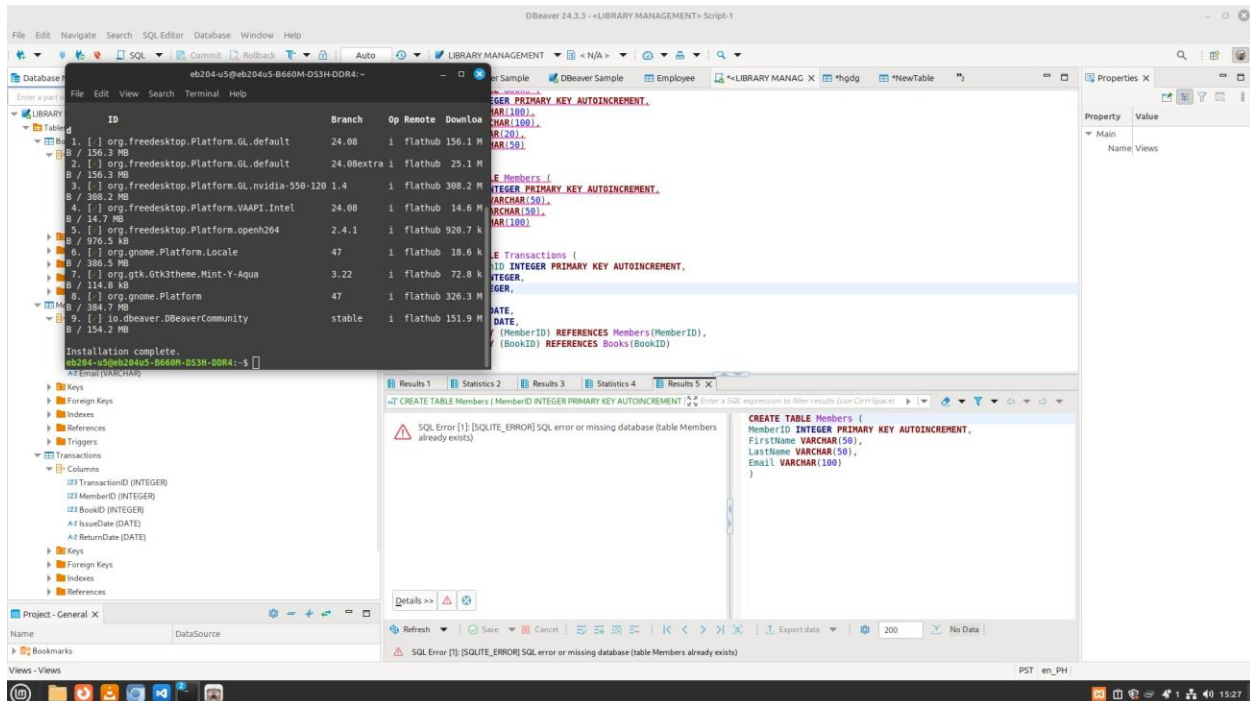
MySQL Installer

MySQL Workbench (or any preferred MySQL client)

Laptop or computer with administrative rights

Procedure:

1. Download MySQL Installer from the official website.
2. Run the installer and follow the installation steps.
3. Once MySQL is installed, open MySQL Workbench.
4. Connect to MySQL using the root user.
5. Create a new database named LibraryManagement.
6. Verify that the database was created successfully.



Result: A running MySQL instance with a database called LibraryManagement.



Additional Questions/Discussions:

- Why is MySQL popular for DBMS?

Answer: MySQL is popular due to its open-source nature, ease of use, scalability, and strong community support.

- What are the advantages of using MySQL for a library management system? Conclusions:

Answer: MySQL is easy to manage, handles large datasets efficiently, and is cost-effective for organizing library information.

Conclusion:

MySQL was successfully installed and integrated with DBeaver to manage a Library Management System (LMS) with structured tables like Books, Members, and Transactions, ensuring efficient data handling and multi-user access.