Assignment: Setting Up Your Developer Environment

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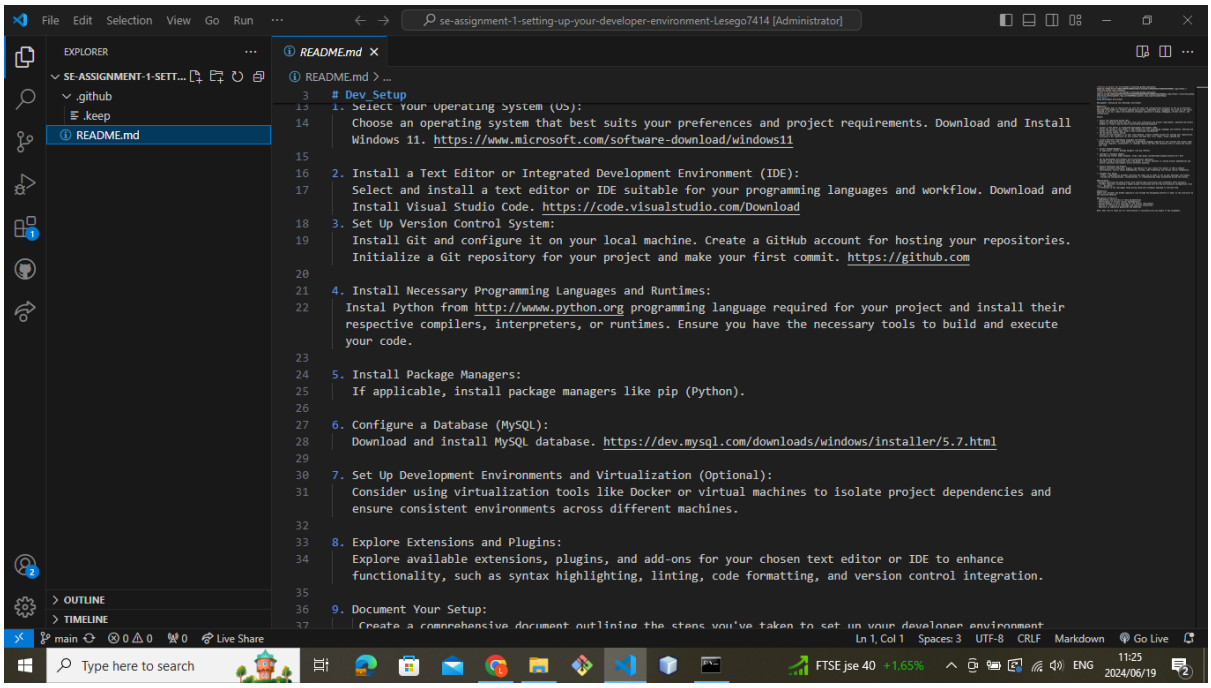
Introdution:

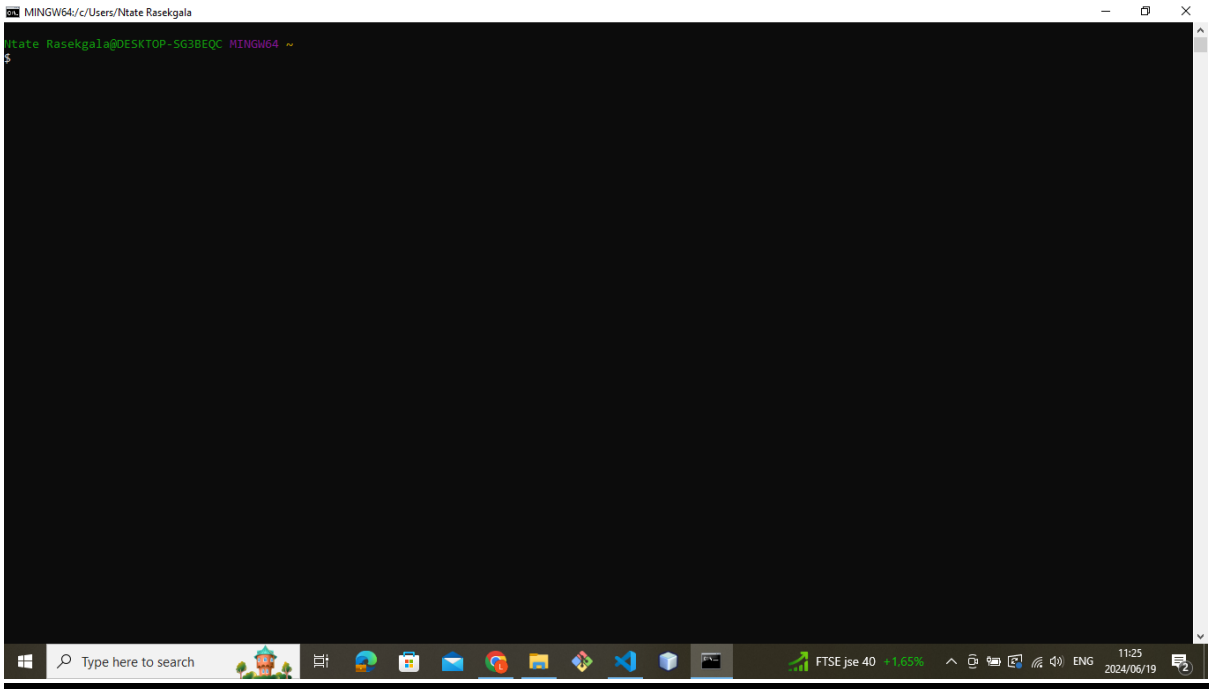
In this assignment, I aim to familiarize myself with the essential tools and configurations required to set up an efficient developer environment for software engineering projects. I will select an operating system, install a text editor or IDE, and configure version control with Git and GitHub. Additionally, I will install the necessary programming languages, set up a MySQL database, and explore useful extensions and plugins. By documenting the entire setup process, I will create a valuable resource for future projects, ensuring I have a robust and organized workspace conducive to coding, debugging, and collaboration.

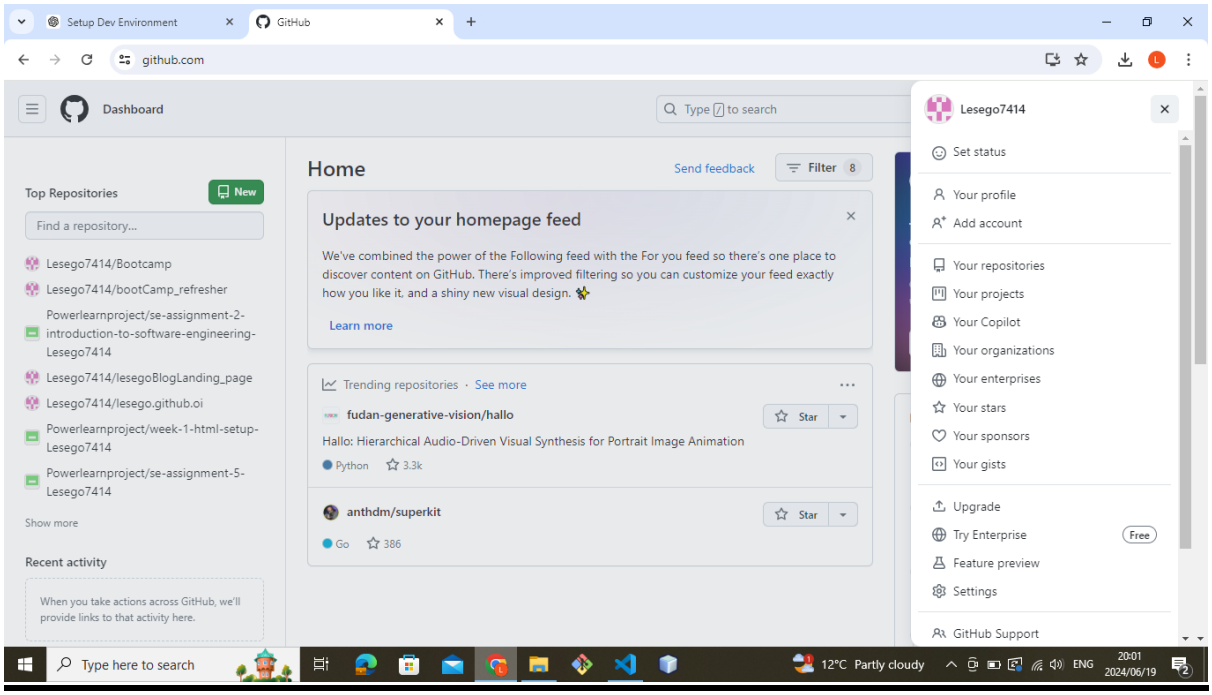
VS Code



Visual Studio Code (VS Code) is a tool that helps you write and manage your code. It works with many programming languages and makes coding easier by offering features like smart suggestions, debugging tools, and support for keeping track of changes in your code. It's designed to work well on different types of computers and is supported by a large community of developers who create add-ons to make it even more useful. Overall, VS Code is great for setting up a workspace where you can work on software projects effectively.

GIT AND GITHUB





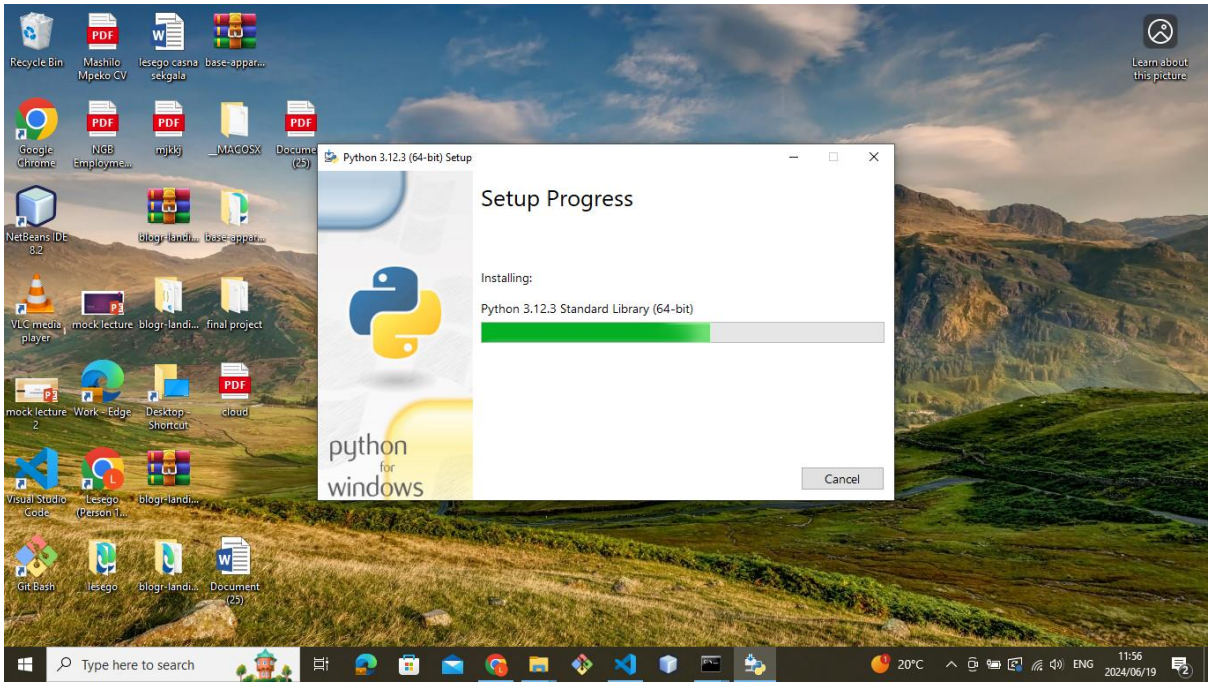
Git is a version control system that helps developers manage changes to their code over time. It allows you to track modifications to files, revert to previous versions if needed, and collaborate with others on coding projects. Git works by creating a repository (or repo) that stores all versions of your code. When you make changes, Git records these changes along with a message explaining what was done. This way, you can keep a history of your project's evolution and manage different versions of your code.

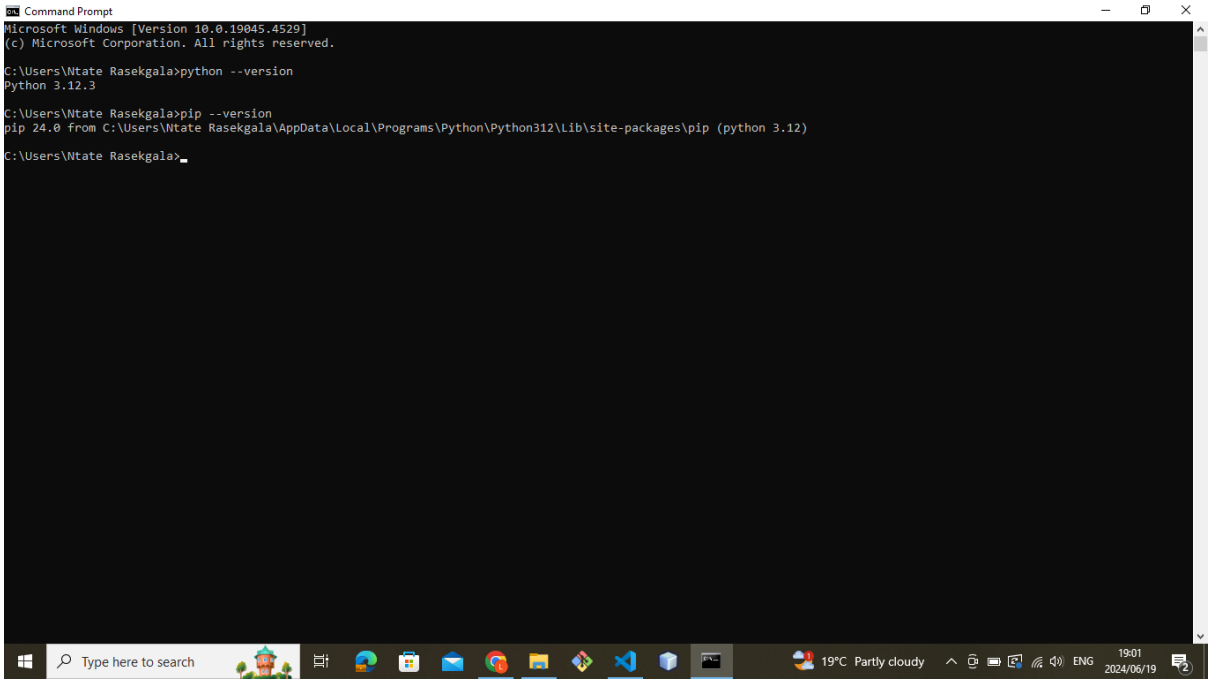
GitHub is a platform that hosts Git repositories in the cloud. It provides additional features built around Git, like collaboration tools, issue tracking, and project management. GitHub allows multiple developers to work together on the same codebase simultaneously. It also serves as a central hub where developers can share their projects, contribute to open-source software, and collaborate on private repositories securely.

PYTHON

Python is a computer programming language that people use to write software. It's known for being easy to read and understand. Python is used in many areas like making websites, doing math and science calculations, creating artificial intelligence, and more. It lets programmers write code quickly and efficiently.

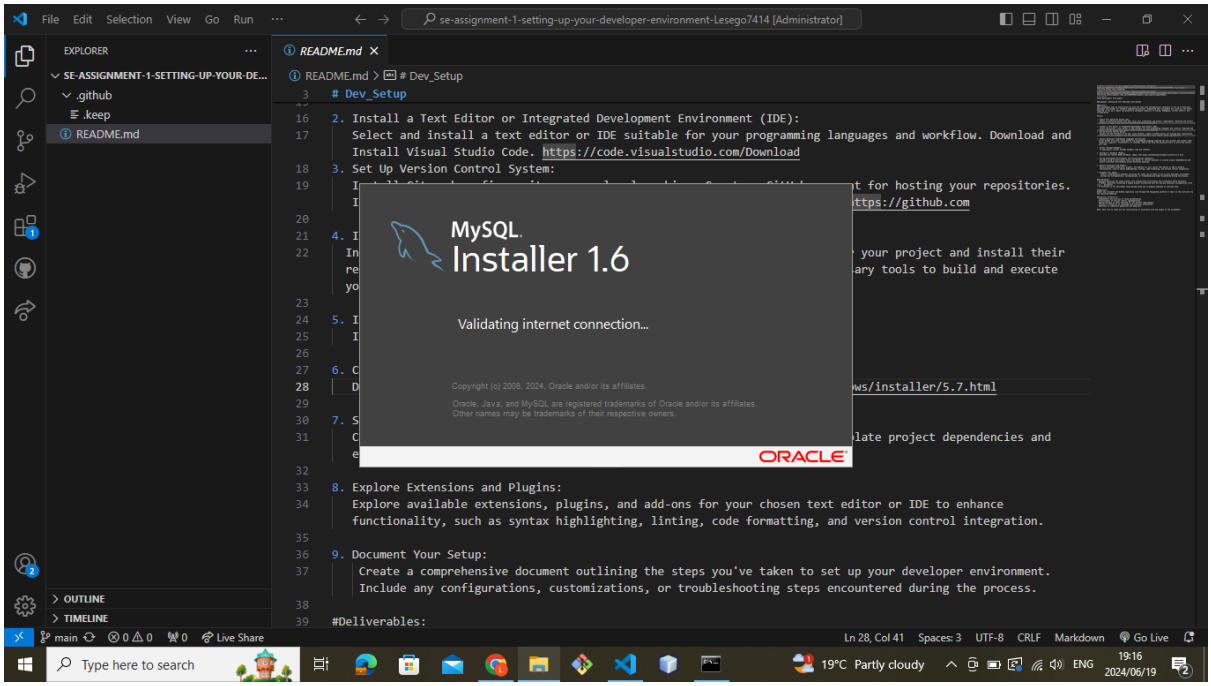
pip is a tool that helps people who use Python install and manage additional software packages that extend Python's abilities. These packages can add new features to Python programs, help with different tasks, or make programming easier. Pip connects to a big online collection of these packages called the Python Package Index (PyPI). It's like a store where you can find and download all kinds of useful tools and libraries for your Python projects.





MYSQL

MySQL is a type of software called a **database**. It's used to store and manage lots of information organized in a way that makes it easy to find and use. Think of it like a digital filing cabinet where you can store all sorts of data, from lists of names and numbers to complex information like sales records or user accounts on a website. MySQL helps people create, read, update, and delete this information, making it a powerful tool for managing large amounts of data efficiently.


MySQL.
Installer 1.6
Validating internet connection...
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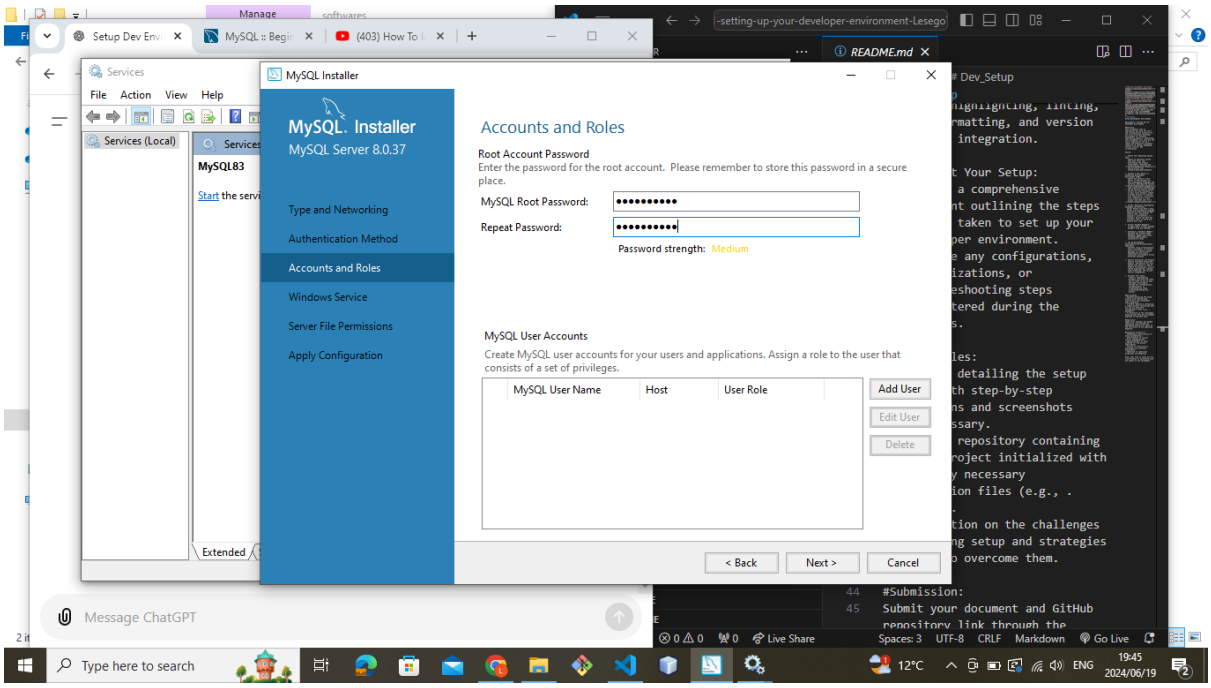
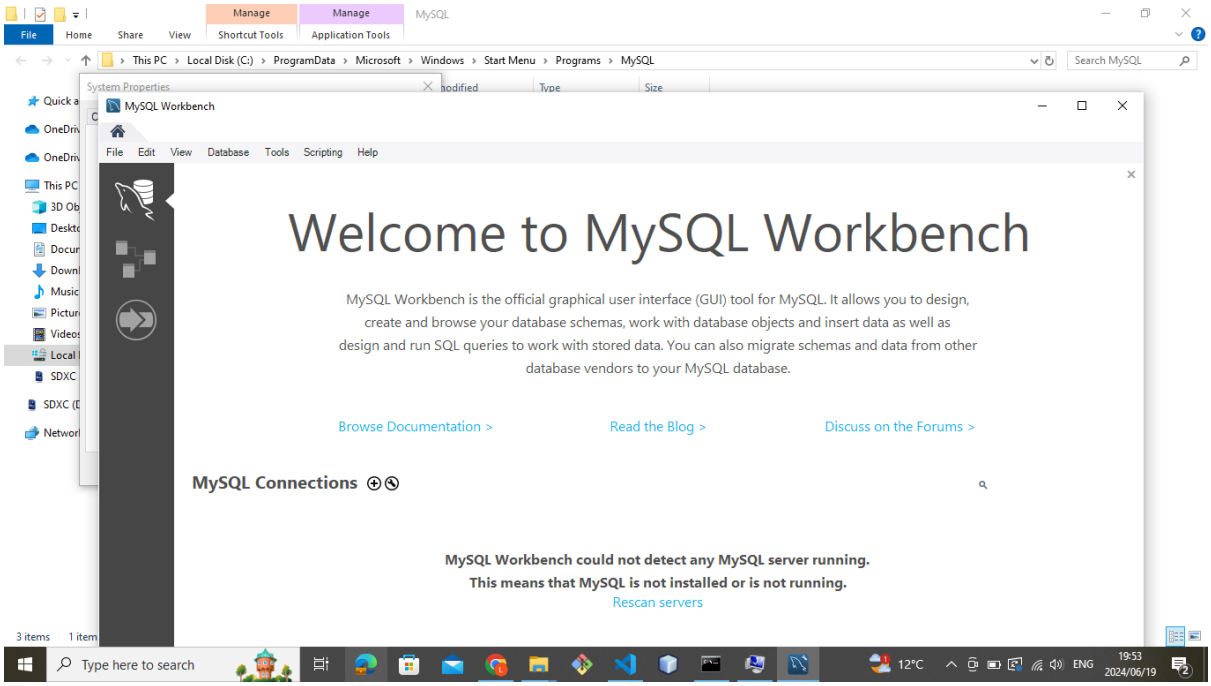
Other names may be trademarks of their respective owners.
ORACLE
Dev_Setup
2. Install a Text Editor or Integrated Development Environment (IDE):
Select and install a text editor or IDE suitable for your programming languages and workflow. Download and
Install Visual Studio Code. https://code.visualstudio.com/Download
3. Set Up Version Control System:
8. Explore Extensions and Plugins:
Explore available extensions, plugins, and add-ons for your chosen text editor or IDE to enhance
functionality, such as syntax highlighting, linting, code formatting, and version control integration.
9. Document Your Setup:
Create a comprehensive document outlining the steps you've taken to set up your developer environment.
Include any configurations, customizations, or troubleshooting steps encountered during the process.
#Deliverables:


MySQL Installer
MySQL. Installer
MySQL Server 8.0.37
Type and Networking
Authentication Method
Accounts and Roles
Windows Service
Server File Permissions
Apply Configuration
Accounts and Roles
Root Account Password
Enter the password for the root account. Please remember to store this password in a secure place.
MySQL Root Password:
Repeat Password:
Password strength: Medium
MySQL User Accounts
Create MySQL user accounts for your users and applications. Assign a role to the user that consists of a set of privileges.
MySQL User Name
Host
User Role
Add User
Edit User
Delete
< Back
Next >
Cancel
Services
MySQL83
Message ChatGPT


MySQL Workbench
File Edit View Database Tools Scripting Help
Welcome to MySQL Workbench
MySQL Workbench is the official graphical user interface (GUI) tool for MySQL. It allows you to design, create and browse your database schemas, work with database objects and insert data as well as design and run SQL queries to work with stored data. You can also migrate schemas and data from other database vendors to your MySQL database.
Browse Documentation >
Read the Blog >
Discuss on the Forums >
MySQL Connections
MySQL Workbench could not detect any MySQL server running.
This means that MySQL is not installed or is not running.
Rescan servers
Type here to search
12°C
ENG
19:53
2024/06/19