

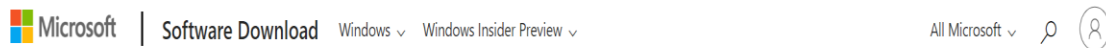
Developer Environment Setup Documentation

1. Operating System Installation.

Steps and Screenshots of Windows 11 Installation.

1. Download Windows 11.

- Visit the official Microsoft website [Download Windows 11 \(microsoft.com\)](https://www.microsoft.com/windows11)
- Download the windows installation assistant.
- Run the downloaded file and follow the on-screen instructions.



Download Windows 11 (Current release: Windows 11 23H2 Update | Version 23H2)

There are 3 options below for installing or creating Windows 11 media. Check out each one to determine the best option for you.

Before installing, please refer to the [PC Health Check](#) app to confirm your device meets the minimum system requirements for Windows 11 and check the [Windows release information status](#) for known issues that may affect your device.

Windows 11 Installation Assistant

This is the best option for installing Windows 11 on the device you're currently using. Click **Download Now** to get started.

 Before you begin using Installation Assistant

[Download Now](#)

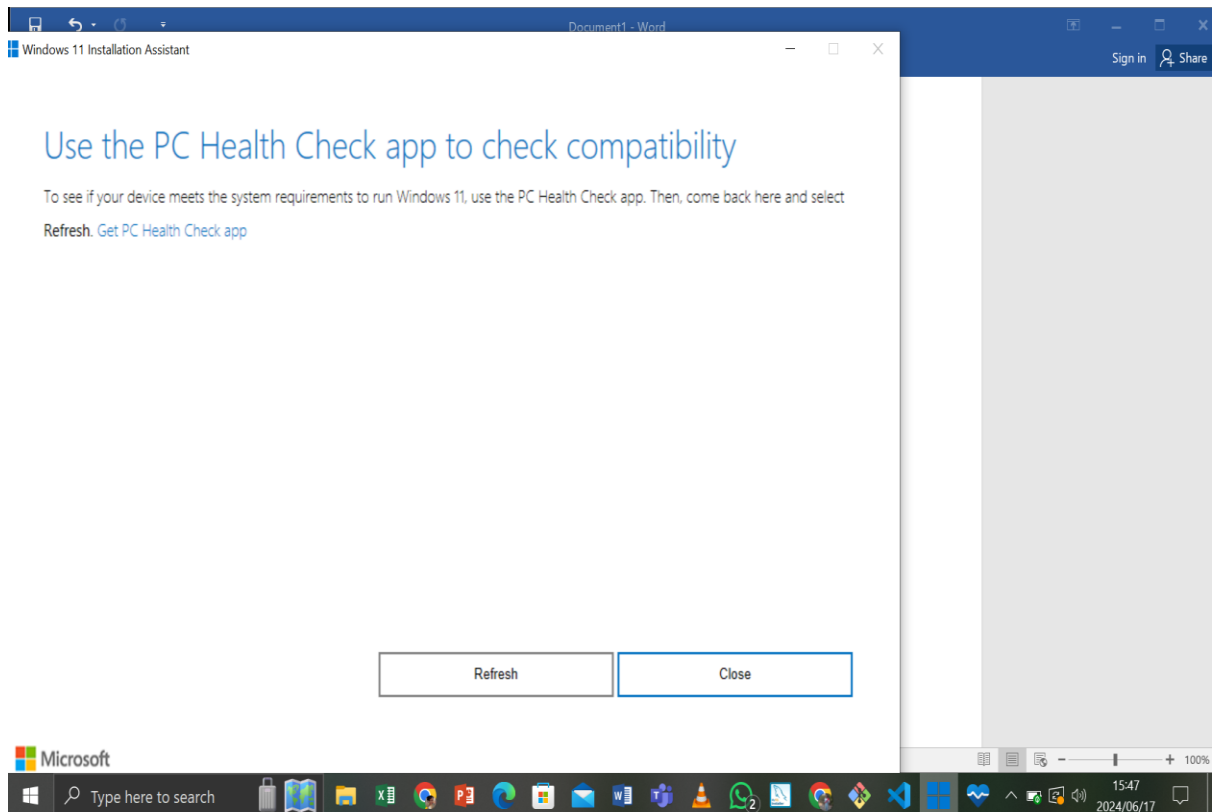


Create Windows 11 Installation Media

If you want to perform a reinstall or clean install of Windows 11 on a new or used PC, use this option to download the media creation tool to make a bootable USB or DVD.

2. Installation Process:

- Ensuring your PC meets the minimum system requirements.
- Use the PC Health Check app to check compatibility.
To see if your device meets the system requirements to run windows 11
- Back up your important files.



3. Post-Installation Setup:

- Configure your use account, regional settings and privacy settings.
- Install necessary drives and updates.

NB: MY PC DOESN'T CURRENTLY MEET WINDOWS 11 SYSTEM REQUIREMENTS. (The processor isn't currently supported for windows 11)

2. IDE Installation.

Steps and Screenshots of Visual Studio Code Installation:

1. Download VS Code:

- Visit the Visual Studio Code download page:
<https://code.visualstudio.com/Download>
- Select the appropriate version for Windows and download the installer.

[Version 1.90](#) is now available! Read about the new features and fixes from May.

Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.

Visual Studio Code Docs Updates Blog API Extensions FAQ Learn Search Docs Download



Windows

Windows 10, 11

User Installer x64 Arm64
System Installer x64 Arm64
.zip x64 Arm64
CLI x64 Arm64



.deb

Debian, Ubuntu

.rpm

Red Hat, Fedora, SUSE

.deb x64 Arm32 Arm64
.rpm x64 Arm32 Arm64
.tar.gz x64 Arm32 Arm64
Snap Snap Store
CLI x64 Arm32 Arm64



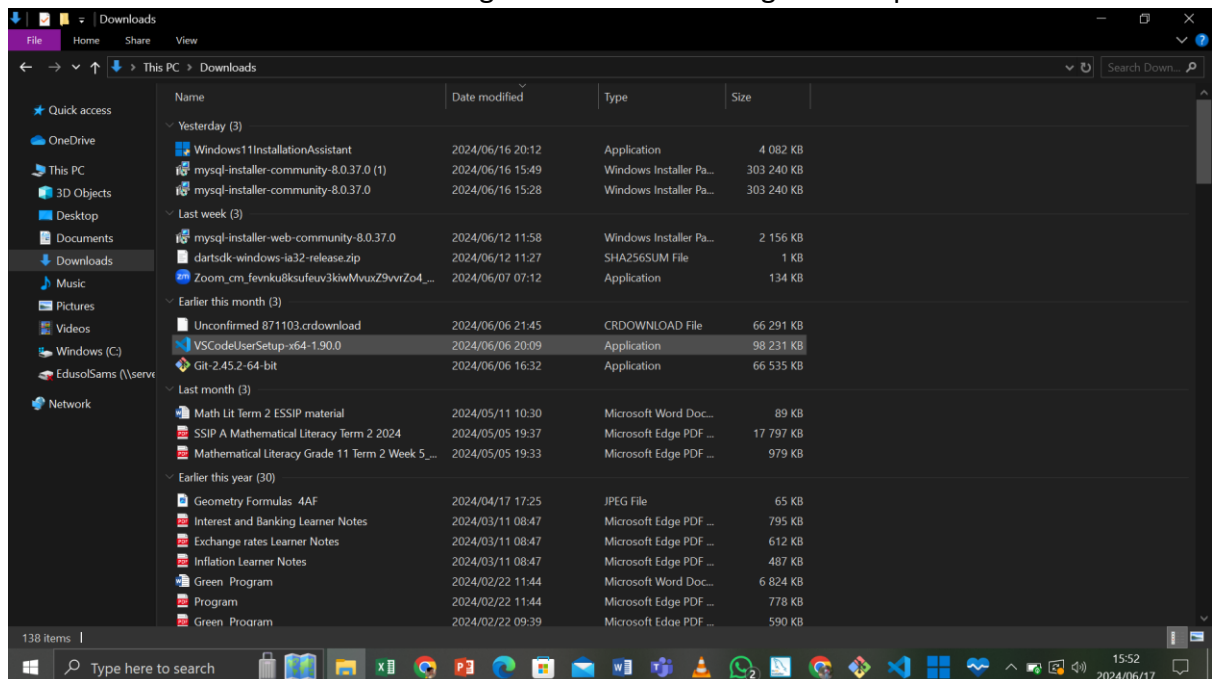
Mac

macOS 10.15+

.zip Intel chip Apple silicon Universal
CLI Intel chip Apple silicon

2. Installation Process:

- Run the downloaded installer
- Follow the installation wizard, accepting the licence agreement and choosing the installation location.
- Select additional tasks such as adding to PATH and creating a desktop icon.



3. First Launch and Setup

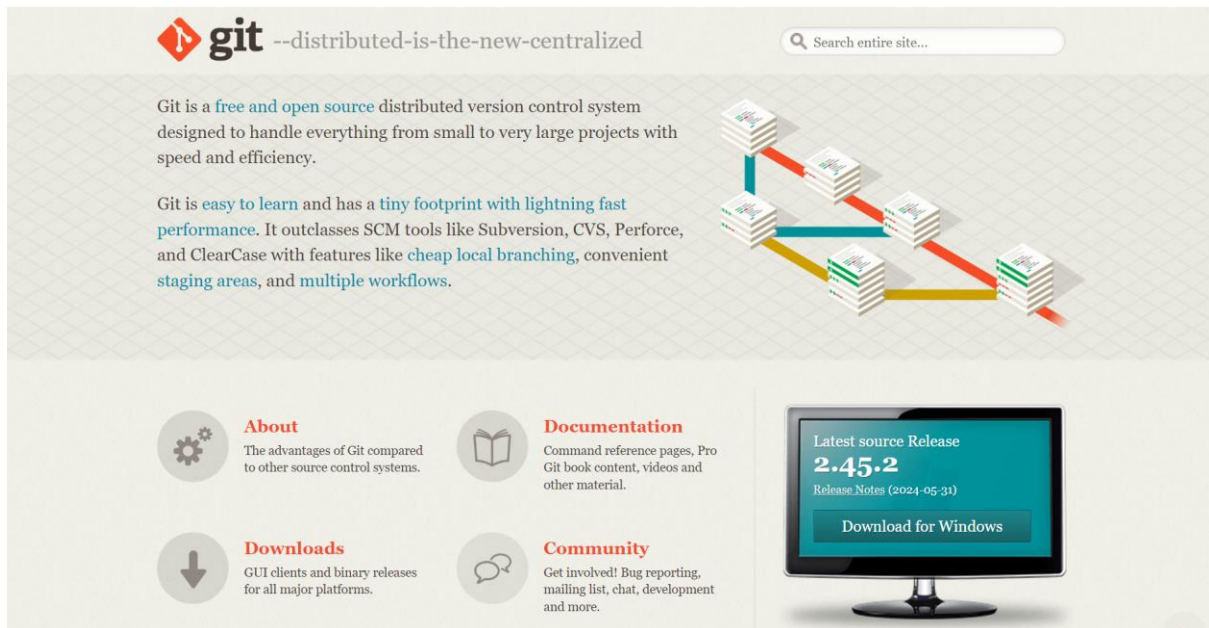
- Launch VS Code and install recommended extensions like MySQL shell, Python, Prettier – Code formatter and Docker.

3. Version Control Setup.

Steps for Installing Git, creating a GitHub Account, initializing a Repository and making the first commit:

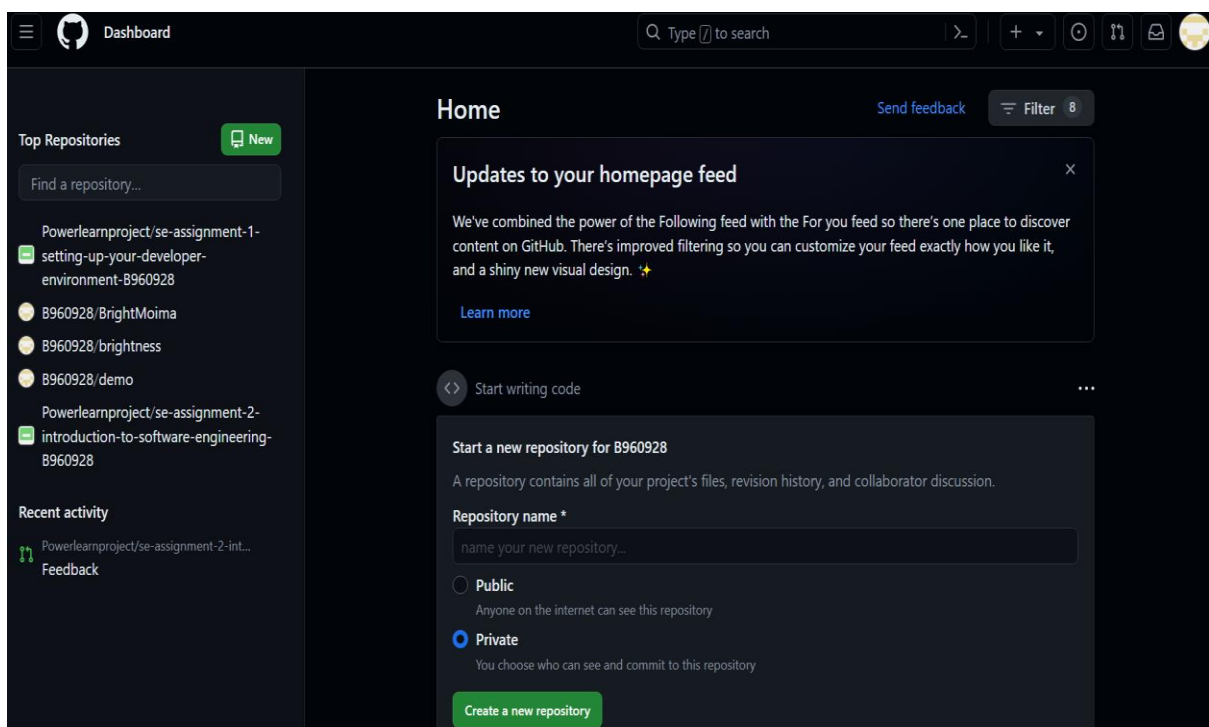
1. Install Git:

- Download Git from the official site <https://github.com>
- Run the installer and follow the setup instructions, choosing your preferred option for PATH, line endings and other setting



2. Create a GitHub Account:

- Visit (<https://github.com>) and sign up for a new account.



3. Initialize a Git Repository:

- Open Git Bash
- Navigate to your project directory or create a new one:
"""git clone ^c"""
"""cd brightness"""
- Initialize a Git repository:
"""bash
git init"""
- Create a Readme file:
"bash
echo "#My Project">>Readme.md "
- Add the Readme file to the staging area:
"git add Readme.md"
- Commit the changes:
"git commit -m "initial commit"

```
Teacher@DESKTOP-FOGONCF MINGW64 ~
$ git clone ^c

Teacher@DESKTOP-FOGONCF MINGW64 ~
$ git clone https://github.com/B960928/BrightMoima.git
Cloning into 'BrightMoima'...
remote: Enumerating objects: 11, done.
remote: Counting objects: 100% (11/11), done.
remote: Compressing objects: 100% (8/8), done.
remote: Total 11 (delta 1), reused 1 (delta 0), pack-reused 0
Receiving objects: 100% (11/11), 5.25 KiB | 1.05 MiB/s, done.
Resolving deltas: 100% (1/1), done.
Teacher@DESKTOP-FOGONCF MINGW64 ~
$ cd BrightMoima

Teacher@DESKTOP-FOGONCF MINGW64 ~/BrightMoima (main)
$ code .

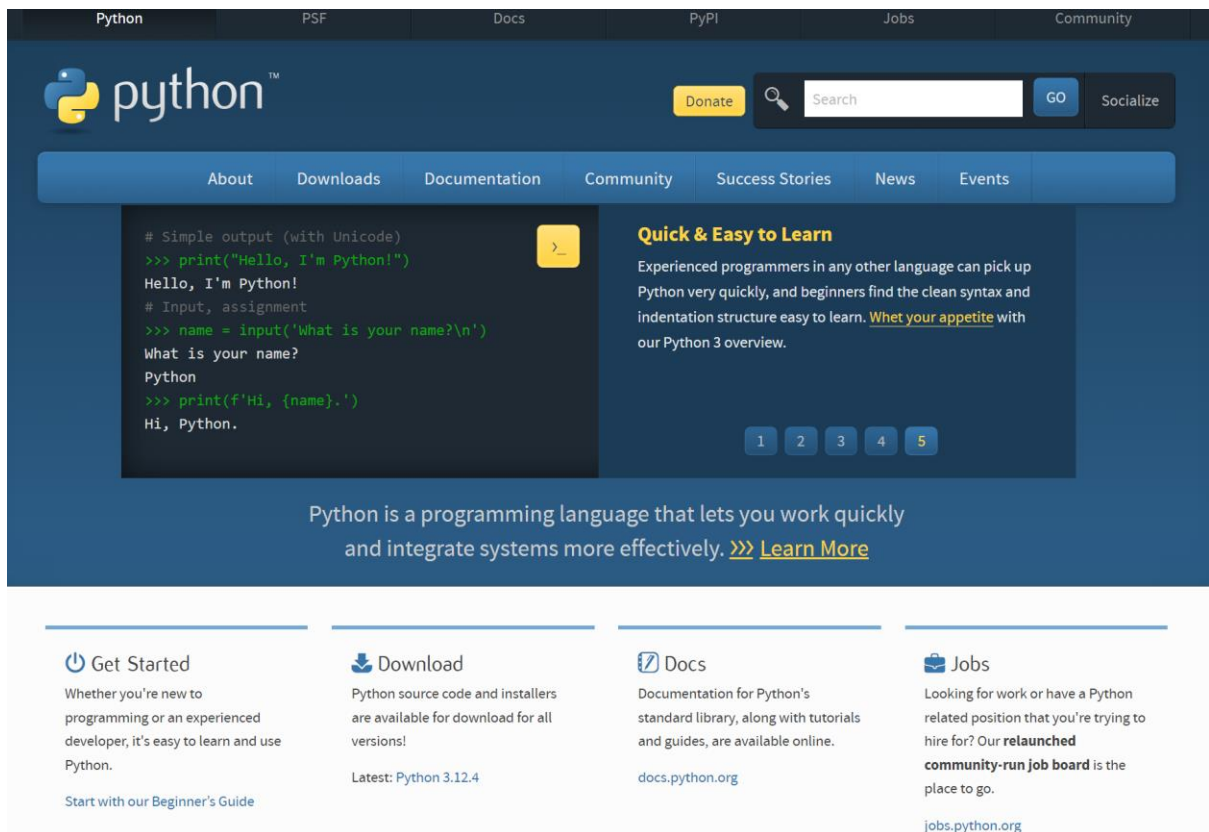
Teacher@DESKTOP-FOGONCF MINGW64 ~/BrightMoima (main)
$ |
```

4. Programming Language and Runtimes

Steps of Installing Python:

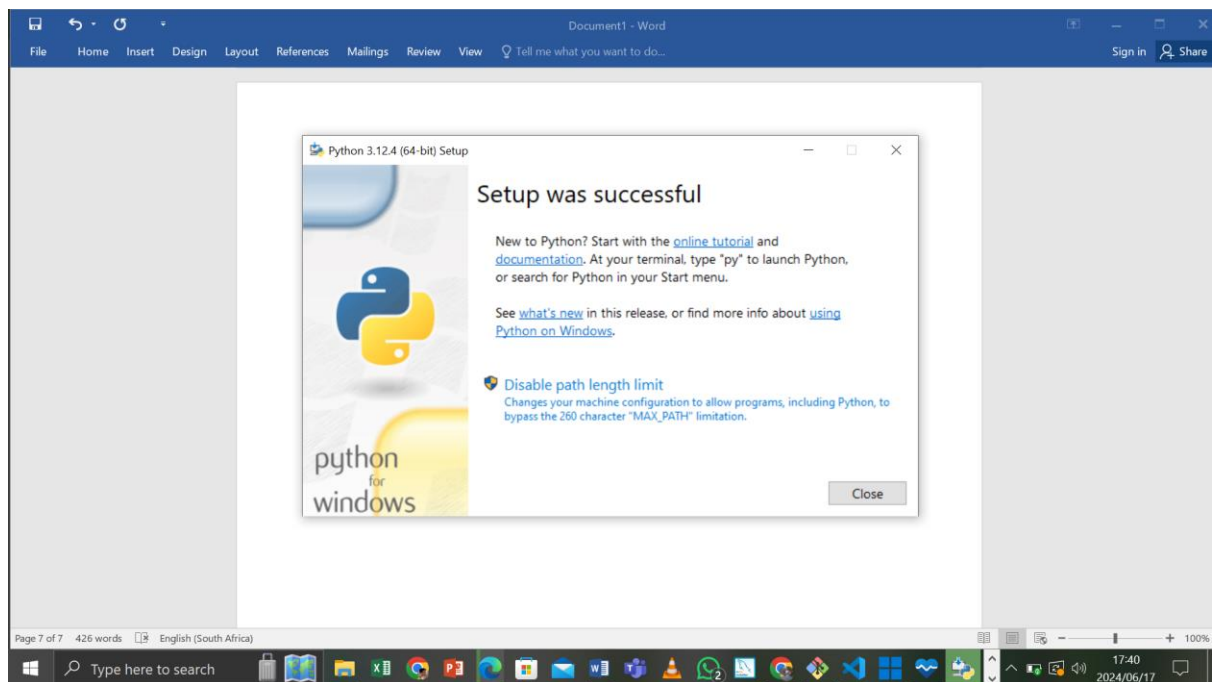
1. Download Python:

- Visit the official Python website (<http://www.python.org>)
- Download the latest version of Python for windows



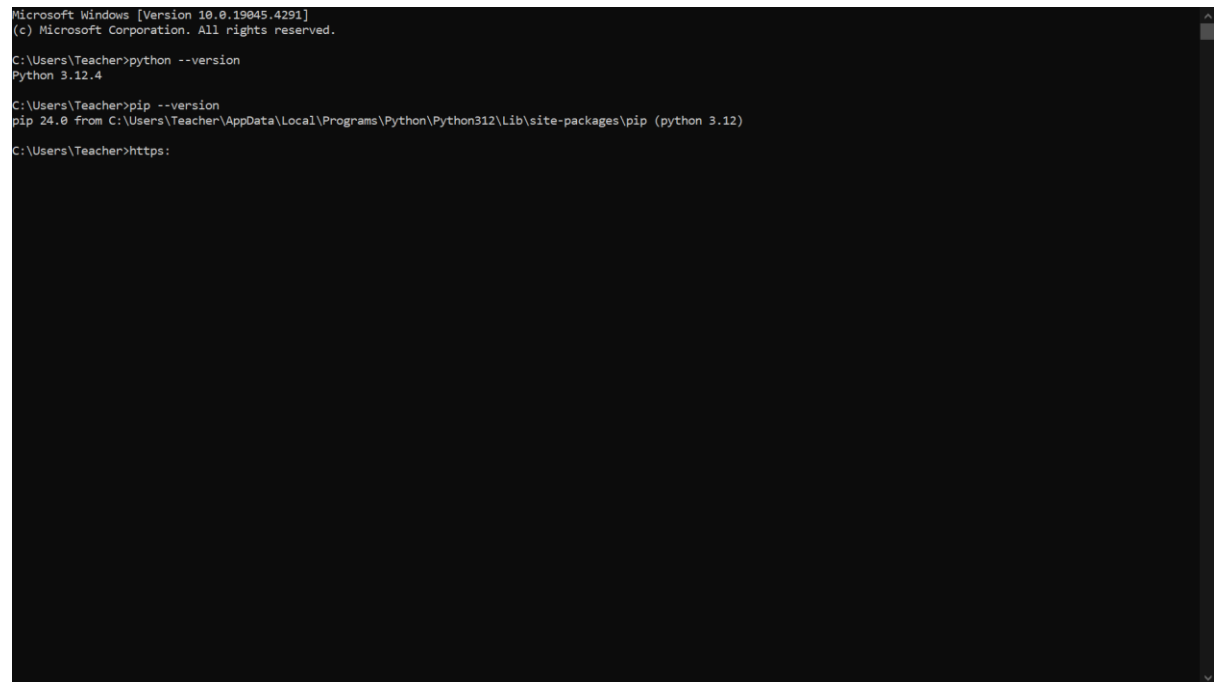
2. Installation Process:

- Open the downloaded installer file.
- Run the installer
- Check the option to add Python to PATH
- Follow the installation wizard click "Install Now"



3. Verify Installation:

- Open Command Prompt and type
“bash
Python –version”
- Verify pip installation
“bash
pip –version”



```
Microsoft Windows [Version 10.0.19045.4291]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Teacher>python --version
Python 3.12.4

C:\Users\Teacher>pip --version
pip 24.0 from C:\Users\Teacher\AppData\Local\Programs\Python\Python312\Lib\site-packages\pip (python 3.12)

C:\Users\Teacher>https:
```

5. Package Managers

Verification of pip Installation

1. Verify pip:
 - Open Command Prompt and type:
“bash
pip –version”

```
Microsoft Windows [Version 10.0.19045.4291]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Teacher>python --version
Python 3.12.4

C:\Users\Teacher>pip --version
pip 24.0 from C:\Users\Teacher\AppData\Local\Programs\Python\Python312\Lib\site-packages\pip (python 3.12)

C:\Users\Teacher>https:
```

6. Database Configuration

Steps for Installing MySQL

1. Download MySQL:

- Visit the MySQL download page:
(<https://dev.mysql.com/downloads/windows/installer/5.7.html>)
- Download the MySQL installer for windows

MySQL Community Downloads

MySQL Installer

General Availability (GA) Releases Archives

MySQL Installer 8.0.37

Note: MySQL 8.0 is the final series with MySQL Installer. As of MySQL 8.1, use a MySQL product's MSI or Zip archive for installation. MySQL Server 8.1 and higher also bundle MySQL Configurator, a tool that helps configure MySQL Server.

Select Version:
8.0.37

Select Operating System:
Microsoft Windows

Windows (x86, 32-bit), MSI Installer (mysql-installer-web-community-8.0.37.0.msi)	8.0.37	2.1M	Download
	MD5: 398f1365f2bd43af9f6ece9add565c1b Signature		
Windows (x86, 32-bit), MSI Installer (mysql-installer-community-8.0.37.0.msi)	8.0.37	296.1M	Download
	MD5: ae605e4f62aa8bb1adef684d62a49f2 Signature		

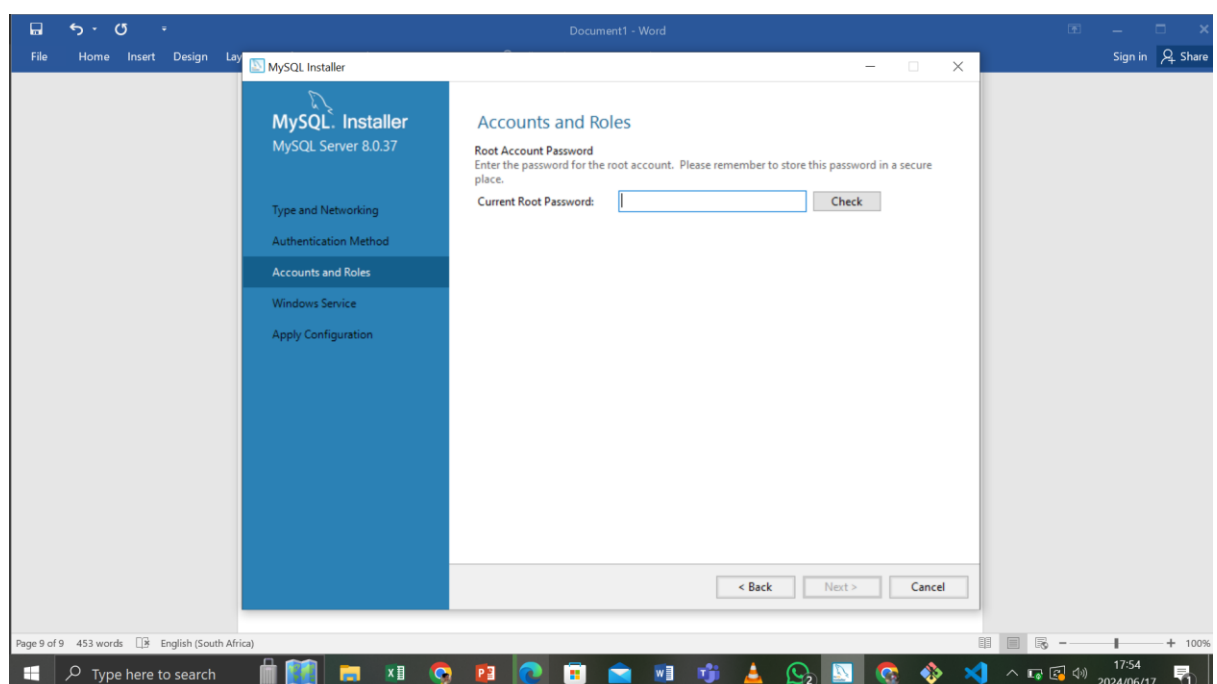
We suggest that you use the [MD5 checksums](#) and [GnuPG signatures](#) to verify the integrity of the packages you download.

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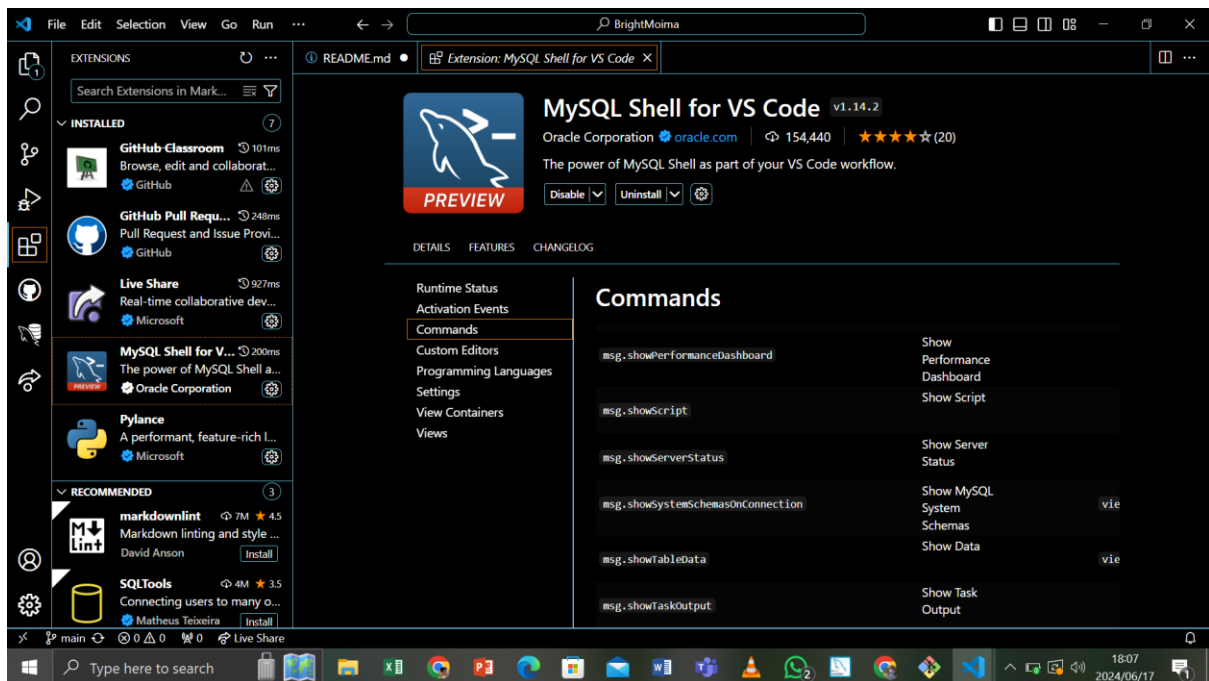
2. Installation Process:

- Run the MySQL Installer and follow the setup wizard.
- Choose the setup type (e.g., Developer Default)
- Configure MySQL server settings, including the root password



3. Verify Installation:

- Open MySQL shell and connect to your MySQL server

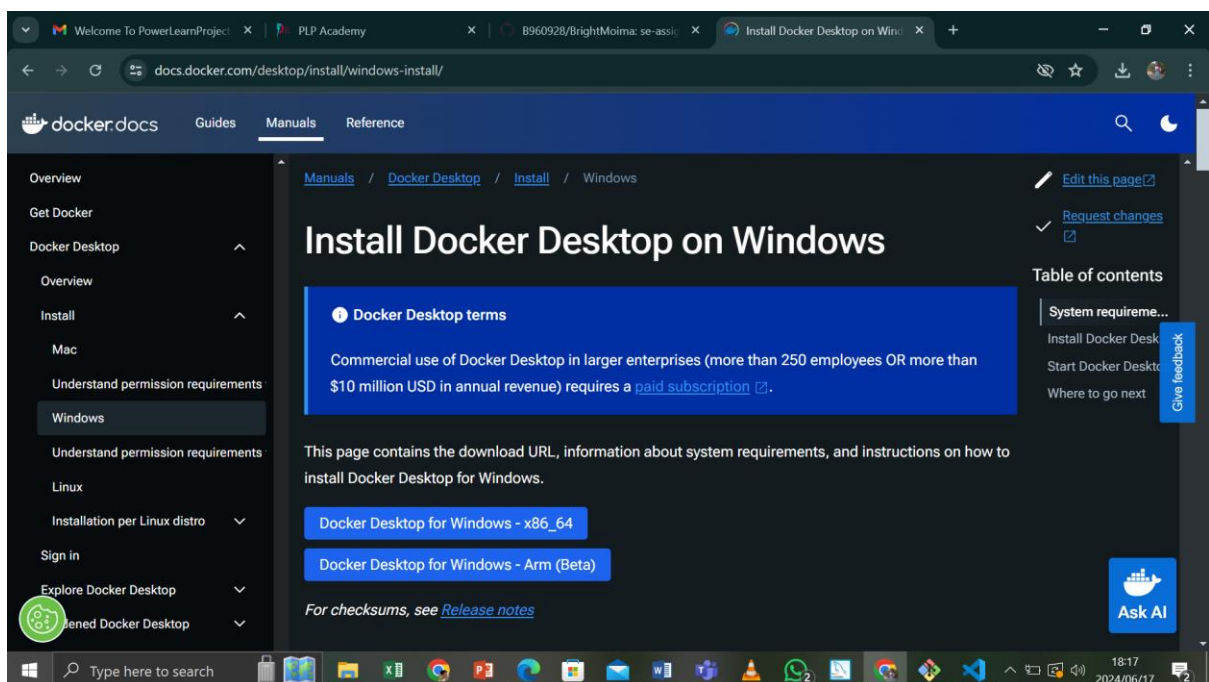


7. Development Environments and Virtualization (Optional)

Optional steps for Installing and Setting up Docker

1. Download Docker:

- Visit the Docker Desktop download page
(<https://docs.docker.com/desktop/install/windows-install/>)
- Download and run the Docker desktop installer



2. Installation Process:

- Follow the installation instructions
- Start Docker desktop and follow the setup wizard

3. Verify Installation:

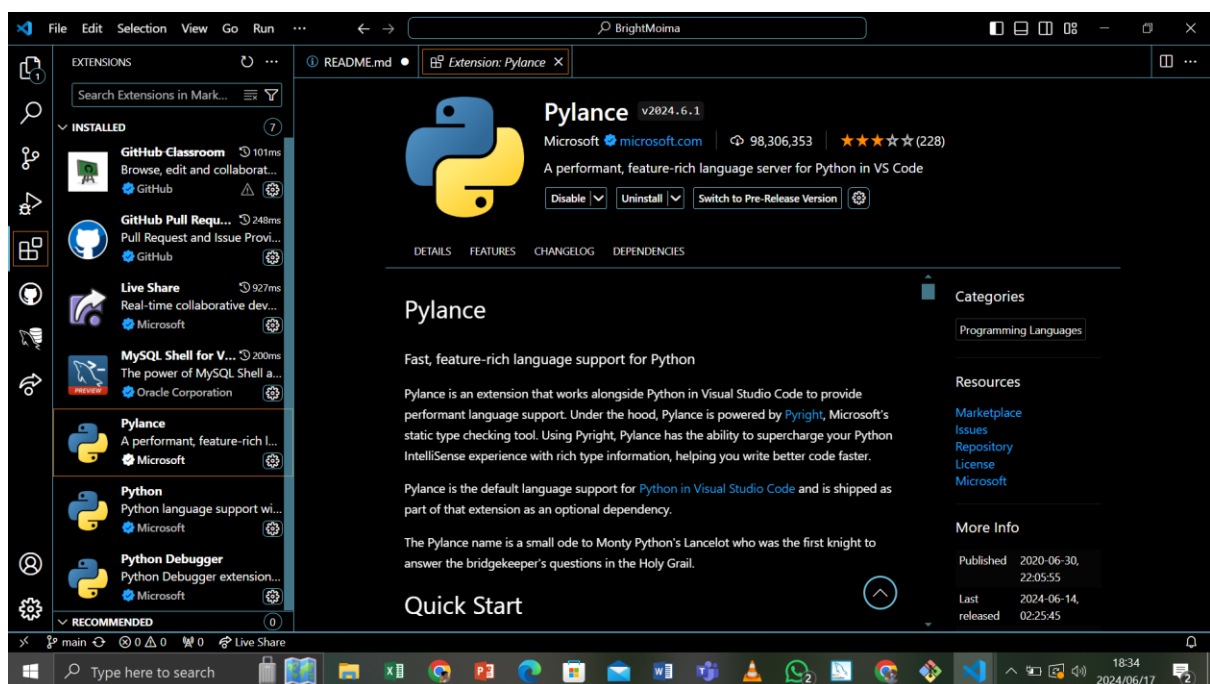
- Open command prompt
"bash
Docker --version

8. Extensions and Plugins

List of Installed Extensions for VS Code

1. Install Extensions:

- Open VS Code
- Go to the Extensions view (Ctrl+Shift+X)
- Search for and install the following extensions:
 - MySQL shell
 - Pylance
 - Python
 - GitLens



9. Challenges and Solutions

Challenges:

- Initializing a Git Repository and making the first commit.
- Python Installation (AppData\local\programs\python) location.
- Installing MySQL and configuring the Root password.

Solutions:

- Used Git documentation and GitHub guide to understand the commands.

- Run “python” in the command prompt
- Step-by-step tutorial and used the official MySQL documentation for troubleshooting

10. Deliverables

1. Setup Documentation:

- This document with detailed steps and screenshots.

2. GitHub Repository:

- (<https://github.com/B960928/BrightMoima.git>).

3. Reflection:

- Included in the challenges and solutions section.