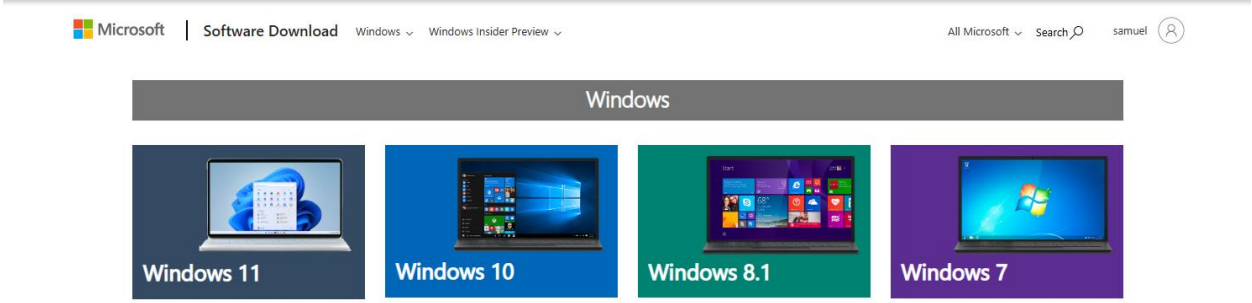
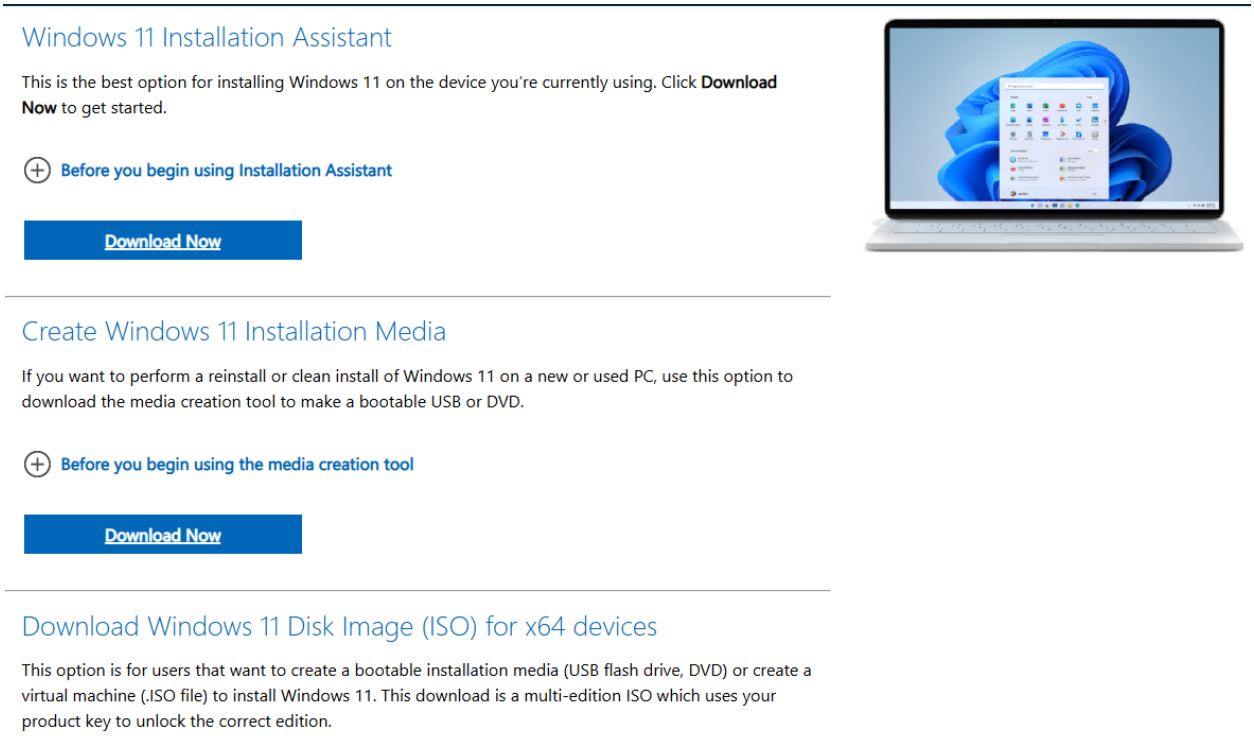
Windows 11 Installation via USB

Steps:

1. Using your favorite browser access the Microsoft official site https://www.microsoft.com/software-download/windows11



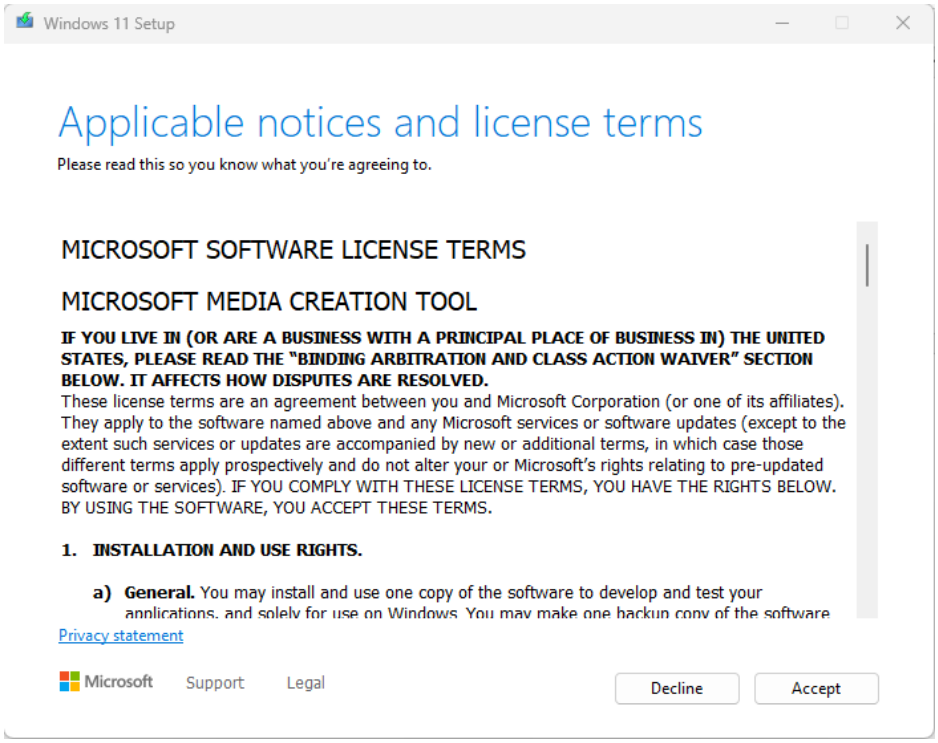
2. Select the appropriate windows version (Windows 11)
3. Select the best way of installation from the options presented on the below window



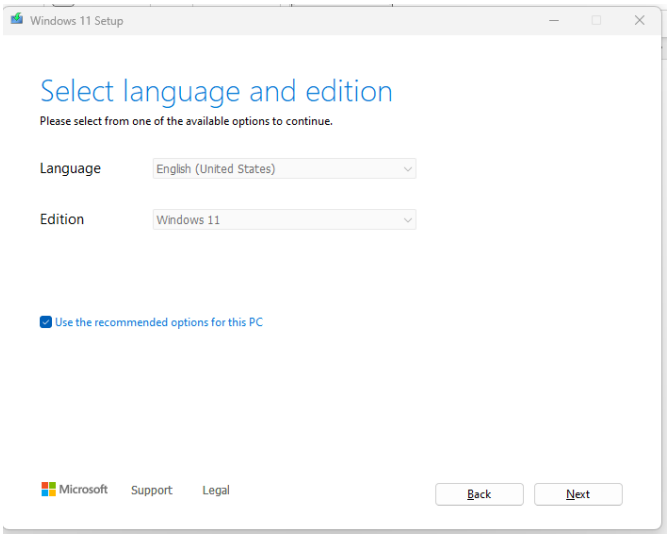
4. If installing on the current device use first option (Windows 11 installation Assistant) click on the download now button. If

using USB to install use second option (Create Windows 11 install)

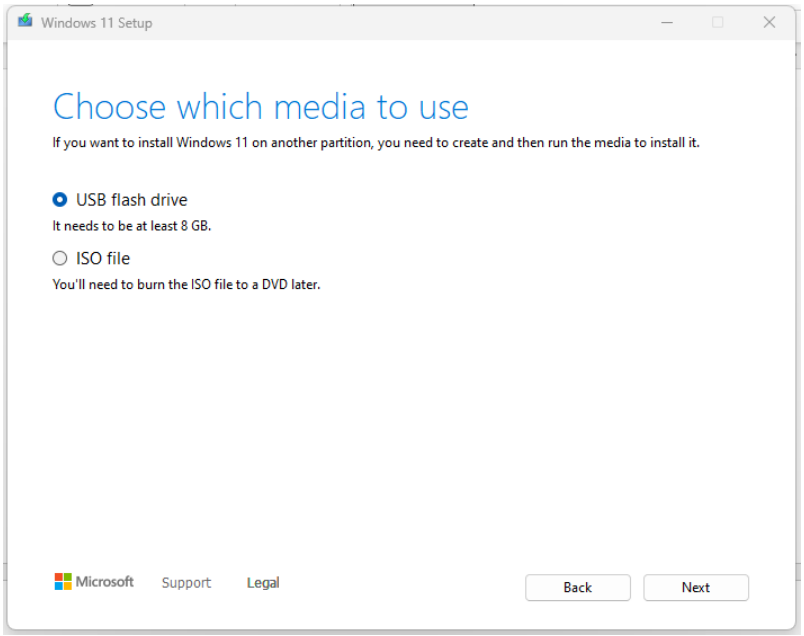
5. Double click on the download file or locate it and open which will open up windows 11 setup window.



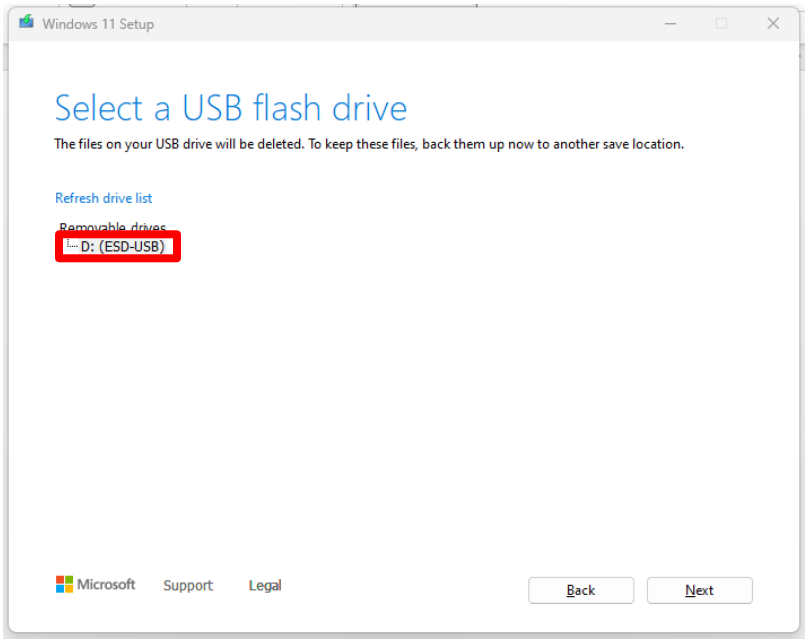
6. Accept or agree to the license terms. Select windows edition and appropriate language on the language setup window below if need be otherwise use the recommended options.



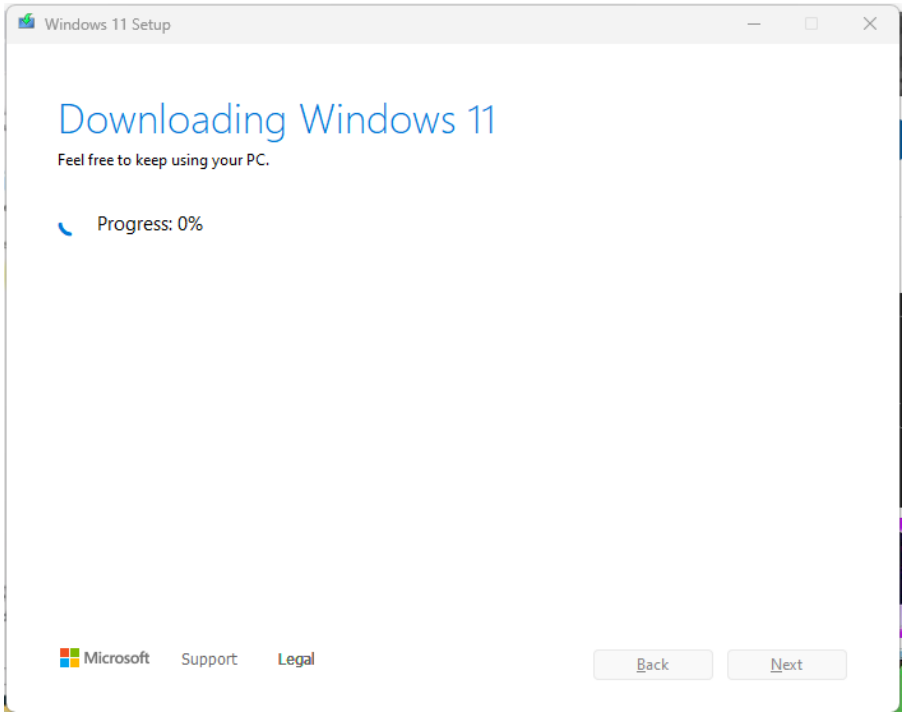
7. Click next on the window that appears since your media is well selected. NB: Ensure your flash drive has at least 8GB of free space as recommended.



8. Insert your USB in the computer and select it on the window below.



9. Give time for the download to finish.



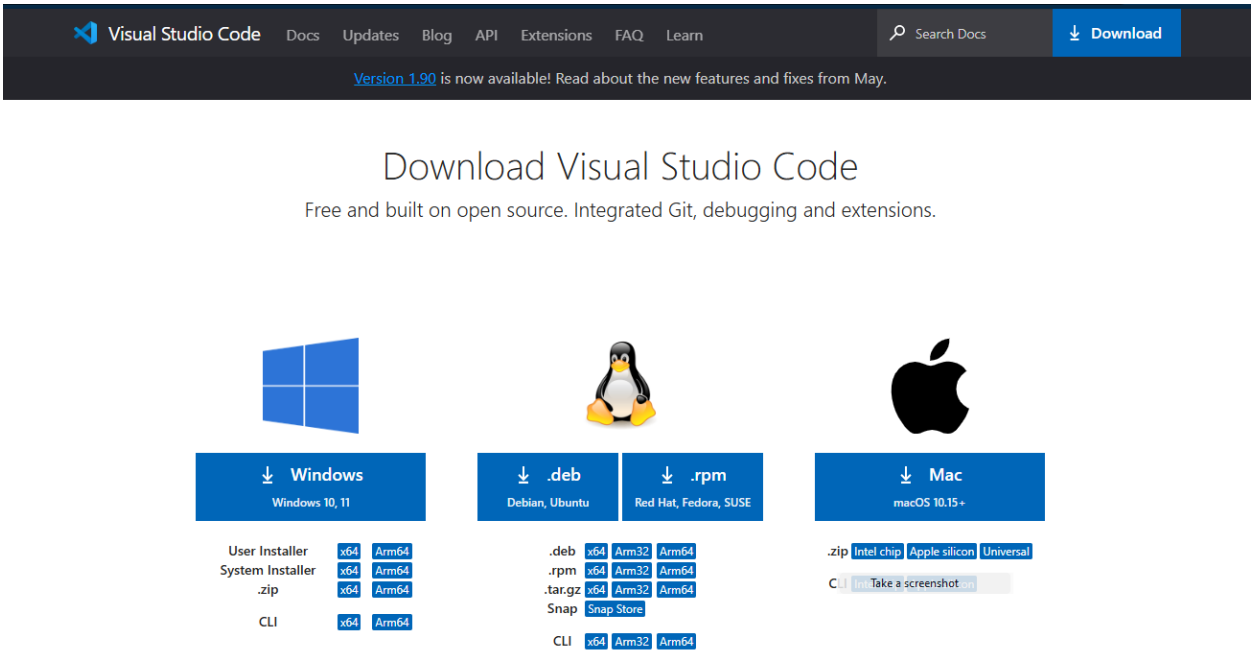
10. When the download is complete safe remove the flash drive and insert it into the computer to be installed with windows 11.

- Switch on the computer
- Press the key that will enable the boot device window.
- Select boot from USB
- Follow the instructions provided to properly install windows 11 to your PC.
- When installation is complete eject/safe remove the flash-drive.

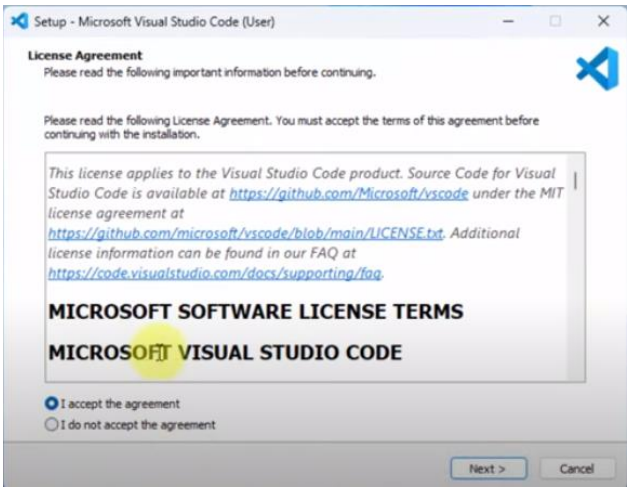
Installation of IDE (Visual Studio code)

Steps:

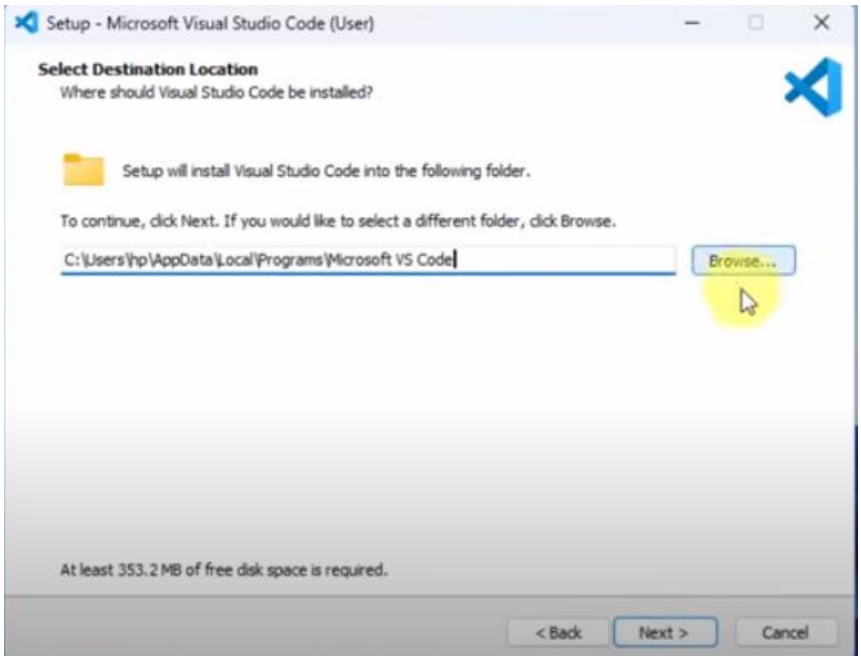
1. Using your favorite browser access the IDE's official site https://code.visualstudio.com/Download



2. Select your preferred OS from the website.
3. The setup file will be downloaded in your PC.
4. Double click on the VScodeusersetup.exe file to install VS code into the computer.
5. Select I accept the agreement and click on next.

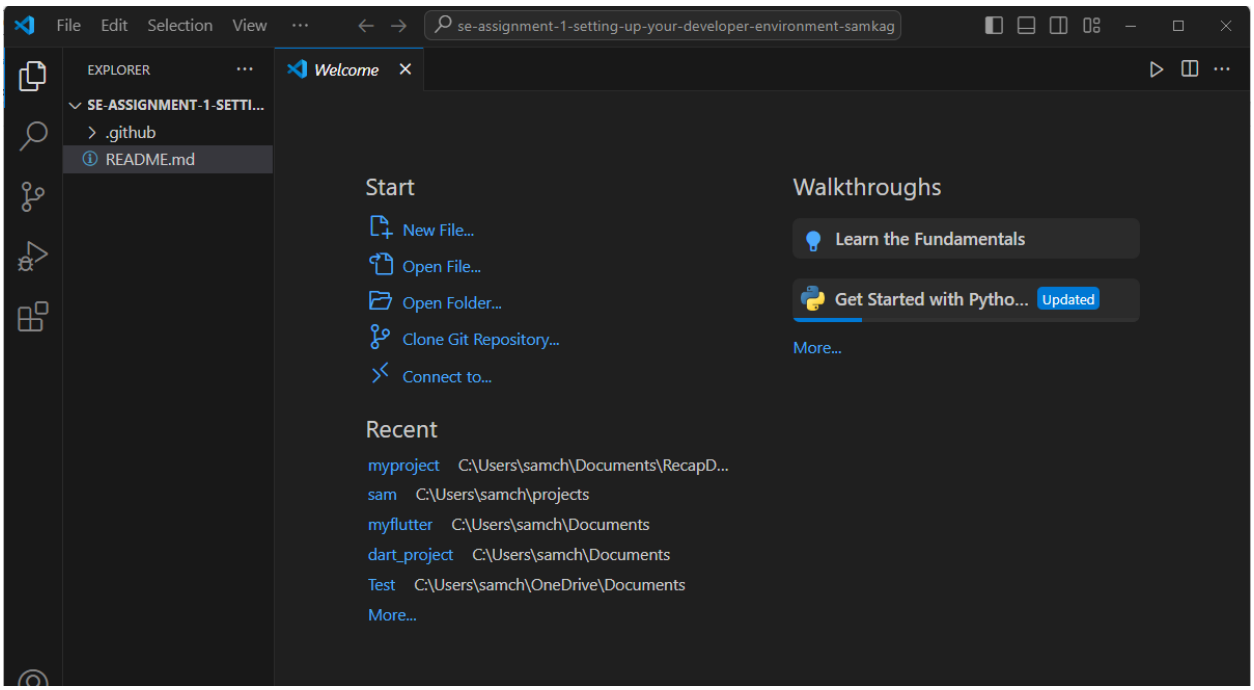


6. Click next on the destination selection window



7. Select next on the select start menu folder window
8. On the select Additional tasks window ensure the following options are checked (Create a desktop icon (Optional), Add to Path) then click next.
9. Select Next on the window that appears to start IDE installation.
10. When the installation is complete click on the finish button.
11. Launch Visual Studio code by double clicking on the icon on the desktop if you checked the option but if you didn't just search on the search bar for Visual studio and open it. When you see the window below you have successfully installed

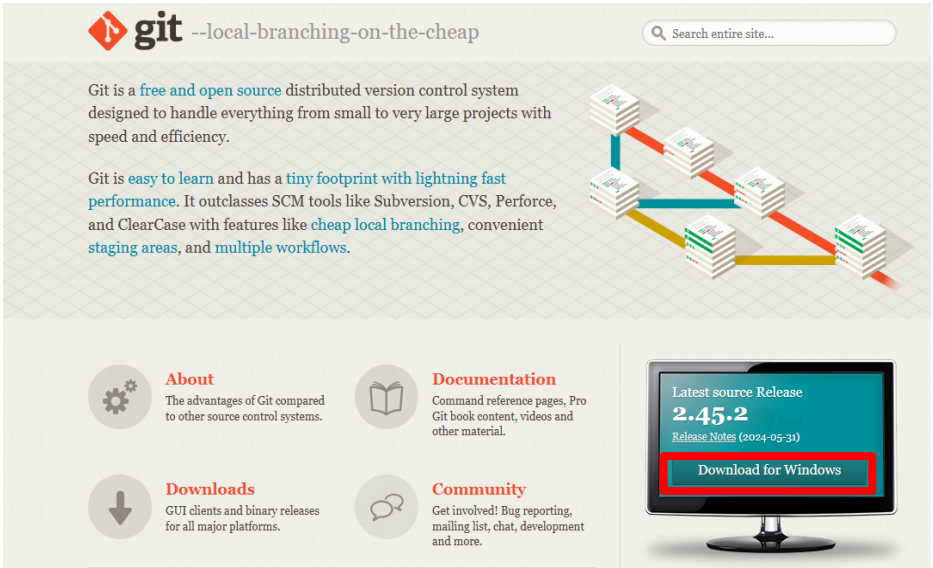
VS Code.



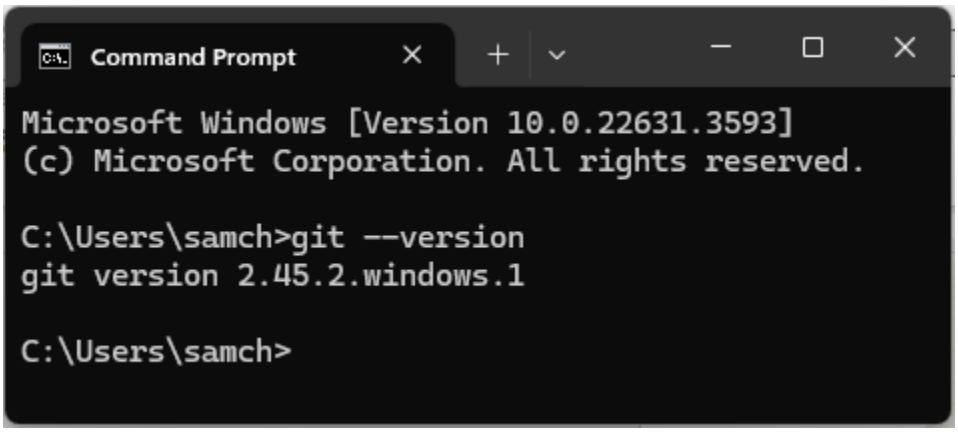
Downloading, installing and configuring Git in PC

Steps:

1. **Download Git**. Using your favorite browser visit the official site https://git-scm.com
2. Select download from the website



3. A new page opens select the link Click here to download the 64bit version or select 32-bit Git for windows Setup version if your system is a 32-bit
4. **Install Git**. Open the downloaded file and follow the prompts in the setup window.
5. **Verify Installation**. Open Command prompt and check the version of the git installed by typing ***git –version or git -v*** Successful installation should display the git version as below.



Challenge: After installation when tried to verify installation an error message.
Solution: I added git to path and I could be able to verify.

6. **Configure git.**
    a. Set your username type: ***git config --global user.name "Your name here"*** Execute by pressing enter key
    b. Set Email address by typing: ***git config --global user.email "your email here"*** Execute by pressing enter key
    c. Check Git configuration by typing***: git config --list*** Execute by pressing enter key. The command will display a list of your Git settings inclusive of the username and email you just entered.

Creating GitHub account

1. Using your favorite browser visit the official GitHub website https://github.com
2. Click on the first link that appears on your search engine.

3. Click on the **Sign-Up** button at the top right.
4. Enter your email address on prompt that appears and then click on Continue button.
5. Create a strong password on the prompt that appears and click on continue button as above.
6. Enter preferred user name (Check if it is available) then select continue.
7. Check the checkbox if you would like to receive occasional product update and announcement and select continue. You account will be verified by solving a puzzle provided and follow the instructions required for verifying. Enter the code sent to your email in the boxes provided.
8. GitHub will redirect you to the Sign In form. Sign in with username/email and Password.
9. After signing in select, the appropriate option on the prompt window that appears (Student) and team members.
10. Select Continue for free and now you are done creating a GitHub account.

Creating Git Repo and having first commit

1. Create new repository by selecting create repository or new repository
2. Give your repository an appropriate name like my first project
3. You can give your repo a description like This is my first repository
4. Can decide to add a README file by checking the checkbox beside the Add a README file option.
5. Click on Create repository button at the bottom of the page.
6. Launch preferred version control system (Git bash)
7. Locate the directory you want to locate the project e.g. Desktop, Documents or C/D/F drive by typing ***cd Desktop/***
8. Make a directory inside the Desktop by typing ***mkdir projectname*** and execute by pressing enter key
9. Change directory to your projectname by typing ***cd projectname***

10. Clone your repo by typing ***git clone*** followed by git project link or URL like https://github.com/username/projectname then execute
11. Open the directory you created using your preferred IDE (VS Code) by typing ***code .***
12. Create a file by selecting the file icon. Give the file a name like ***git.txt***. Type Some text inside the git.txt file like **this is a test file for my first project** and **save** or activate the auto save command by selecting the file tab and scroll down to **Auto Save** command and click on it to activate it.
13. Change directory to your GitHub project name by typing ***cd projectname*** the main functionality appears at the end of your project name as follows ~/Documents/project/projectname (main)
14. Then add the changes done by typing ***git add –all or git add .***
15. Then finally give a message of the changes made by typing ***git commit -m "Added a new file"*** and then execute.
16. Finally send the added file to your GitHub by typing ***git push***
17. It its your first time a window will be prompted to select how to sign in – I **select sign in with browser**. Select preferred browser. Then **authorize git**. You will receive a **successful authentication** message.
18. Go to your GitHub account and refresh to see the file you just added from your PC. You should be able to view the git.txt file in your repo. Click on the file to open and you should be able to see the text you typed **This is a test file for my first project**

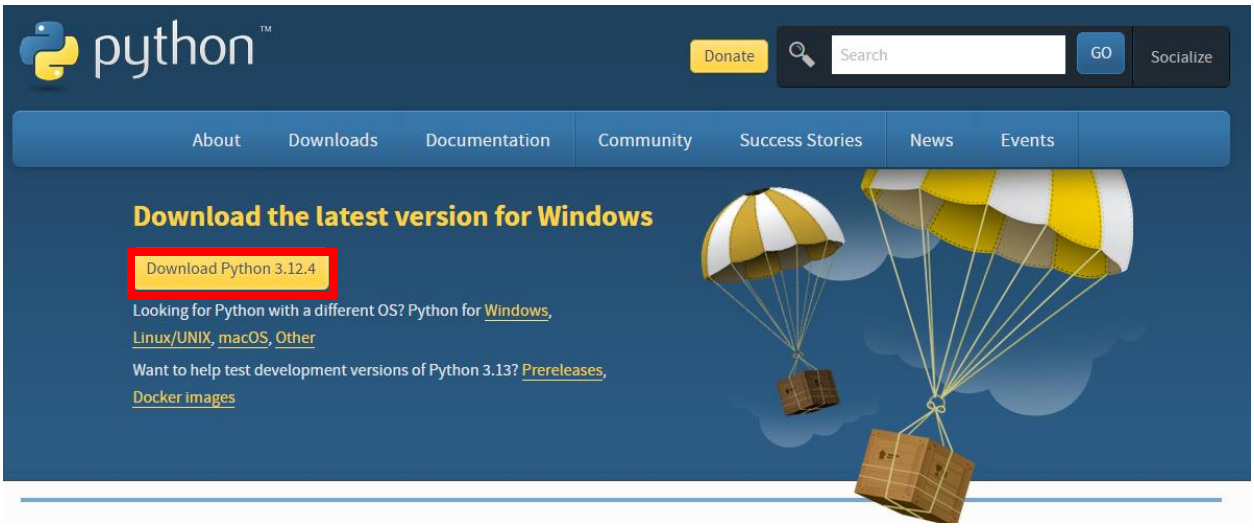
Python download and Installation

Steps:

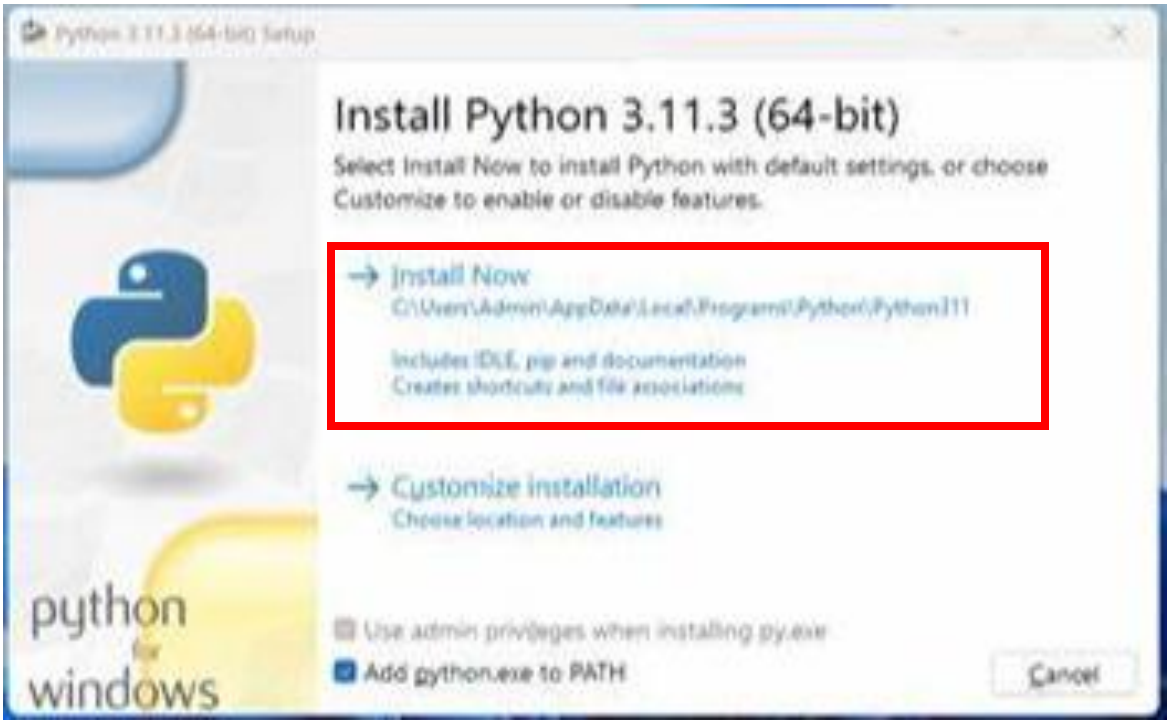
1. Using your favorite browser access the python official site shown below
http://wwww.python.org

2. Hover over the Download button, then hover over the button below Download for windows and click it to download python for windows OS.

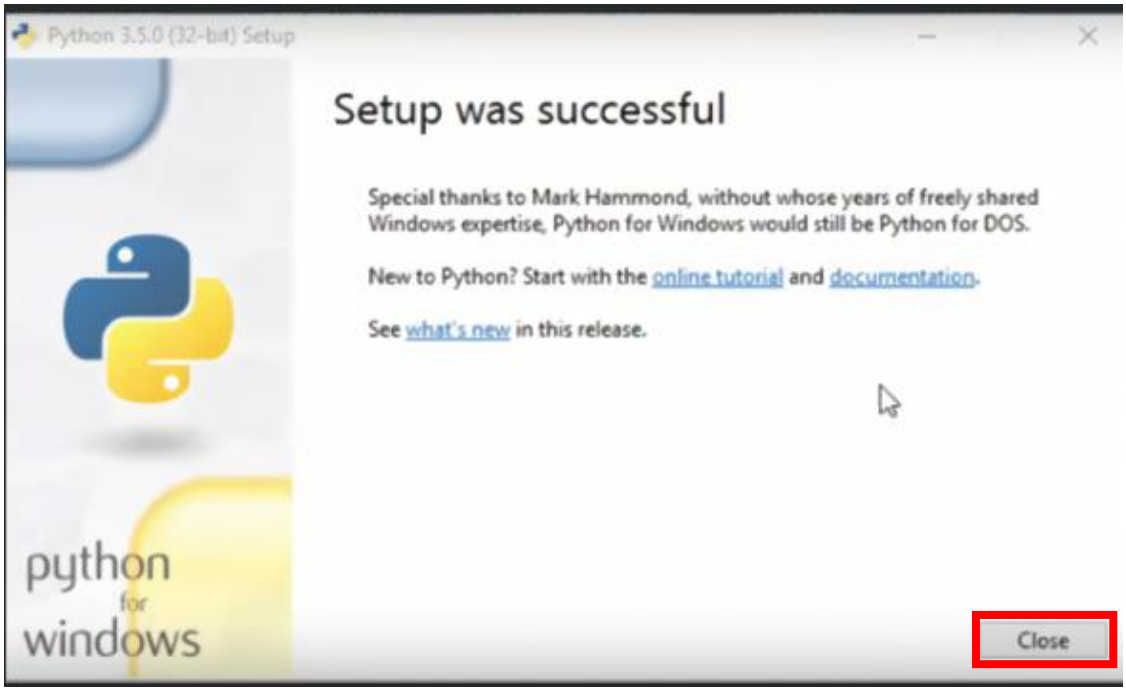
Or Click on the Downloads Button and select Download Python 3.12.4 on the page that appears if using windows OS or choose the appropriate OS that suits you.



3. Locate the download python file and double click to start installation. Remember to check checkbox Add python.exe to PATH and select Install Now option. Give time for the installation to complete.



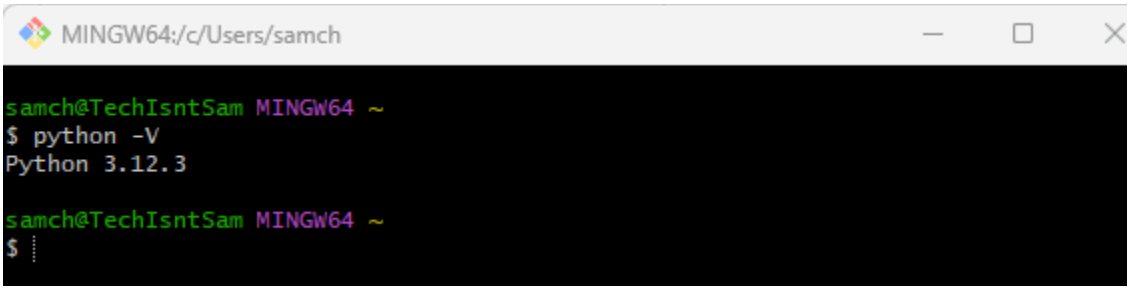
4. On successful installation you should receive a message **Setup was successful** window as show below. Click on close.



5. Verify Installation

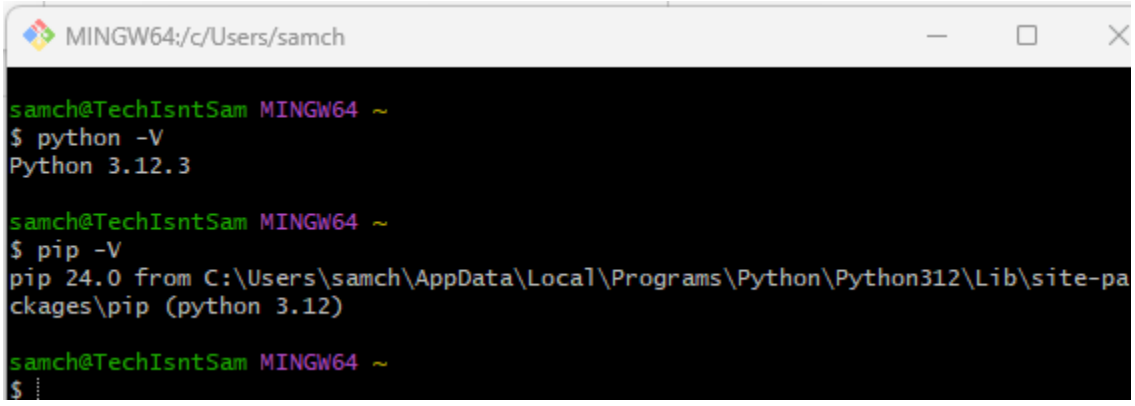
- Open command prompt or Git Bash and type ***python –version*** or **python -V**

- If successfully installed you will receive a message as shown below

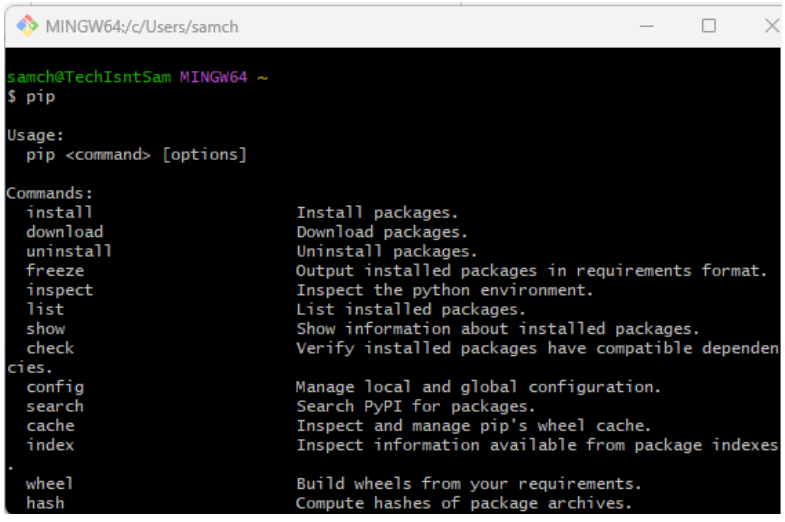


To pip installation verification

When Python is well installed it comes with PIP installed. To verify this type pip –version or pip -V. Pip version should display as below



To view different commands for pip type ***pip*** and execute (press Enter) You should be able to see the commands displayed as below.



To display installed packages type ***pip freeze***

To install a module like requests type ***pip install requests.*** With successful installation you will see the installation success message ***as below***

```
Successfully installed certifi-2024.6.2
```

To verify installation type ***`python -c "import requests"`*** if no error message is given then the module has bees installed successfully.

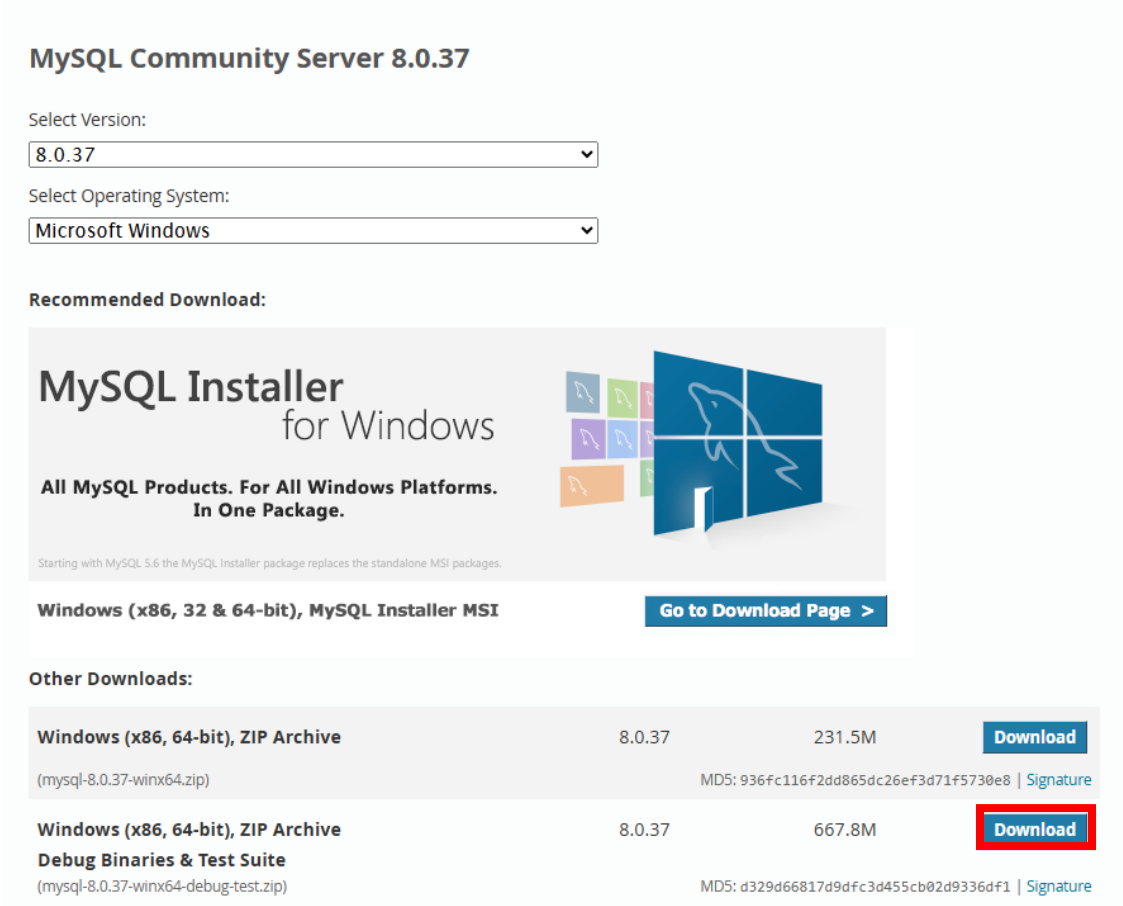
Download and install MySQL database

Steps:

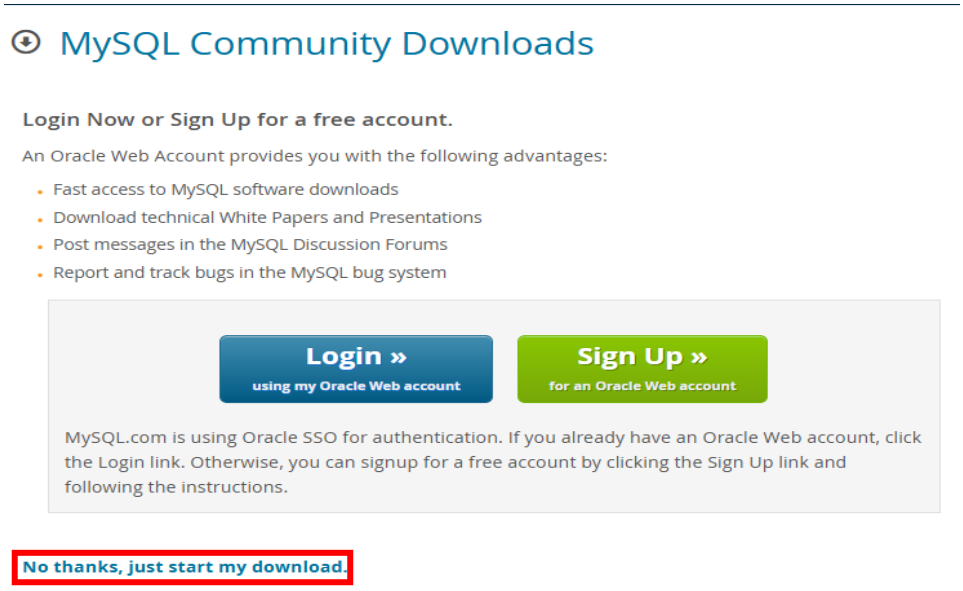
1. Using your favorite browser access the MySQL official site shown below

MySQL :: Download MySQL Community Server

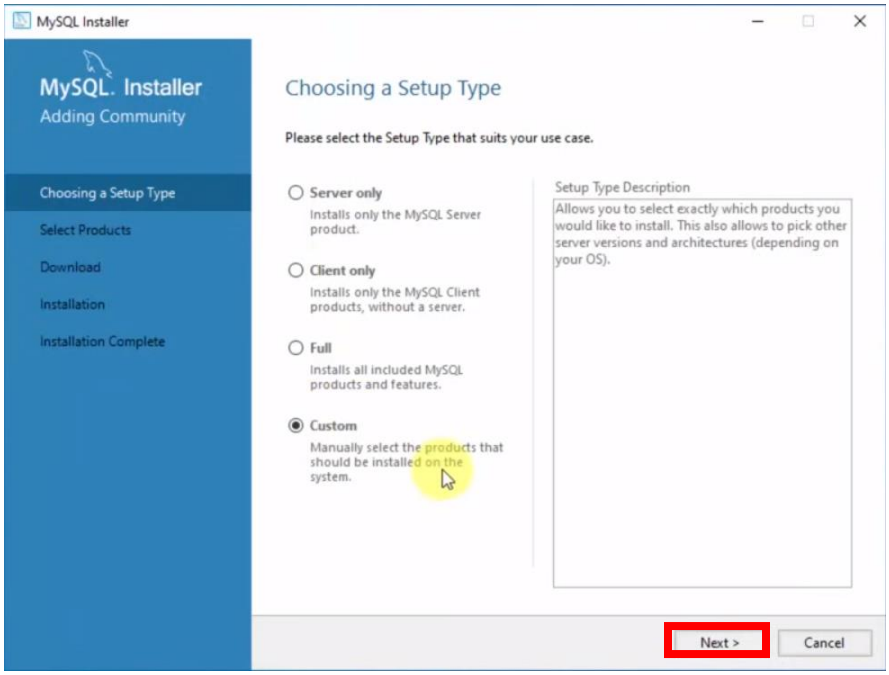
Select option two as show below. Click on **download** to start your download



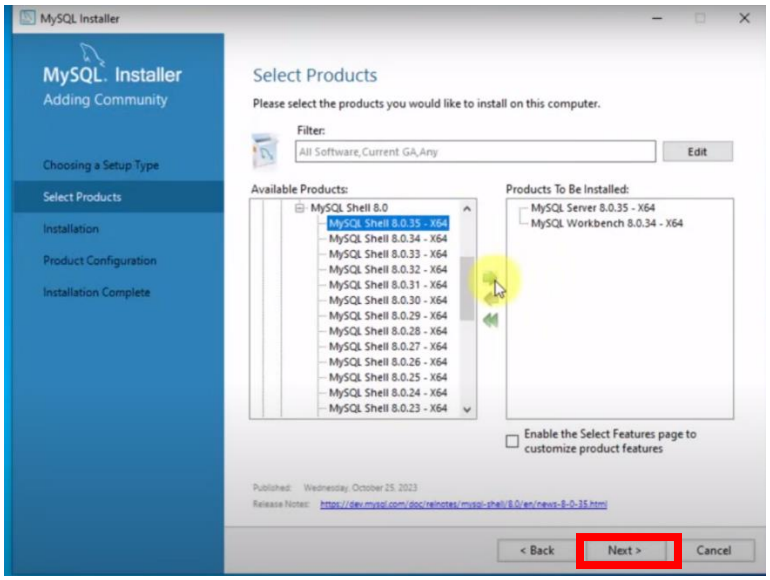
2. On the next window select No thanks, just start my download. Your download should start.



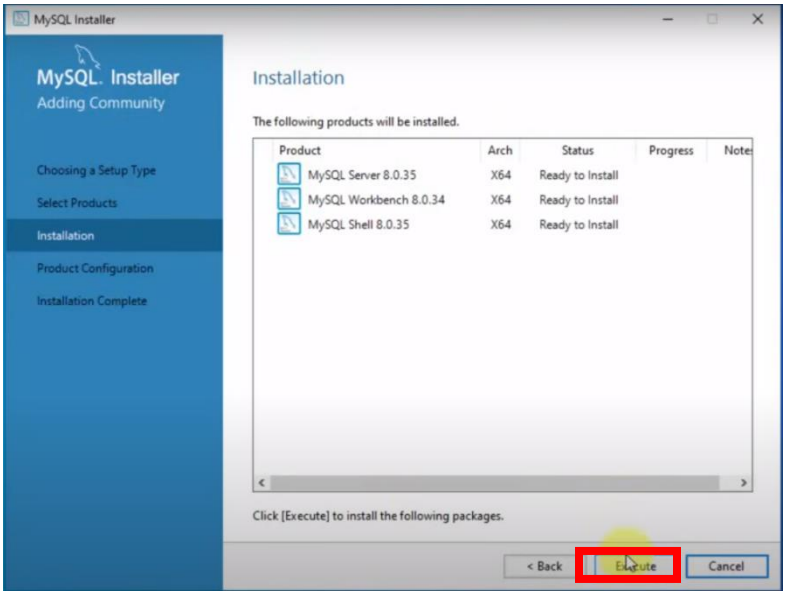
3. Locate your downloaded file and double click to start installation wizard. Select custom and click Next



4. Select the options as shown below then click next

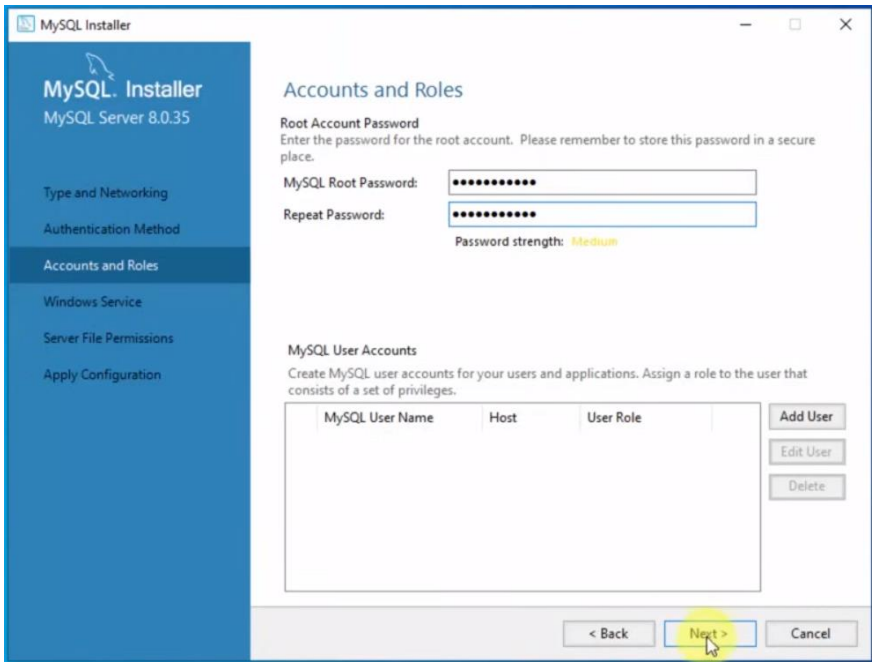


5. Click execute on the next screen to install MySQL server, workbench and shell as shown below. After installation is complete click Next.

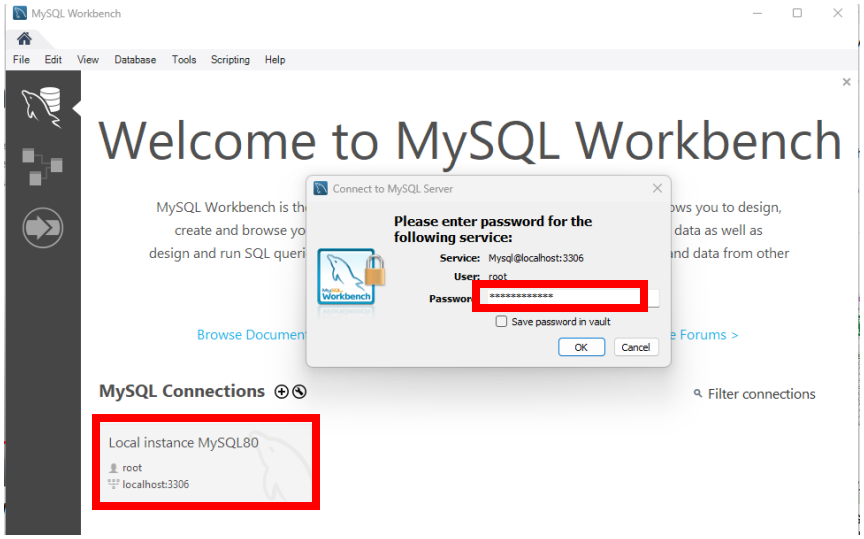


6. On the product configuration window click next.
7. On the **type and networking** do not make any changes only check the **Show Advanced and Logging Options** and click next.
8. On the Authentication Method click next.

9. On the Accounts and roles fill in the root password on the two boxes provided as shown below.

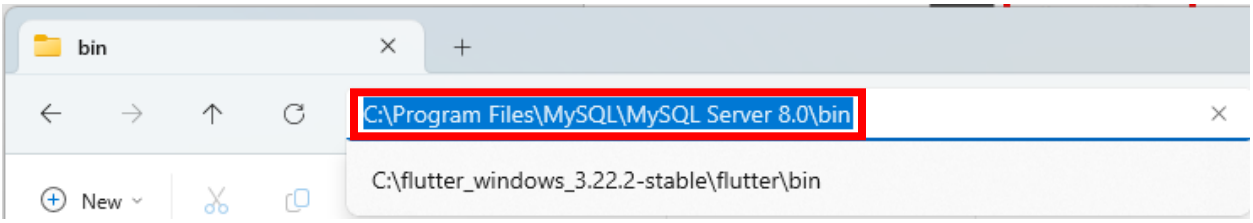


10. On the **Windows Service** window click next
11. On the **Server File Permission** click next too.
12. Click execute on **Apply configuration** window then click finish.
13. On the **Product Configuration** window click next.
14. On the installation complete window click finish.
15. The MySQL command prompt will open and the MySQL workbench too. Click on Local Instance MySQL80 and key in the root password you entered during installation and click **OK** as shown below. You have successfully installed MySQL.

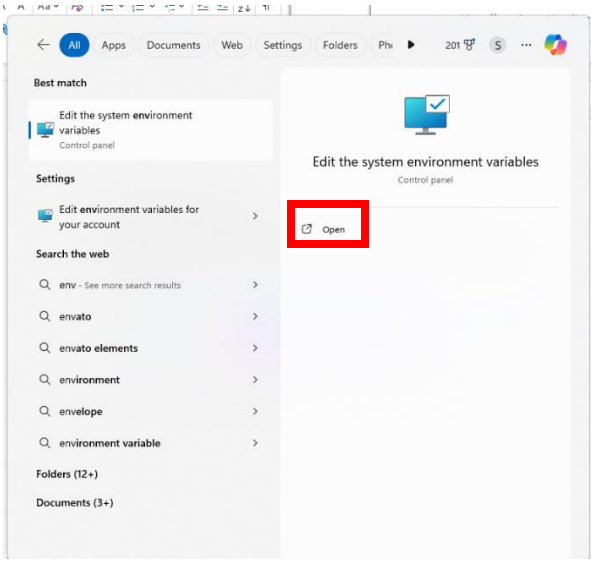


Adding MySQL to path

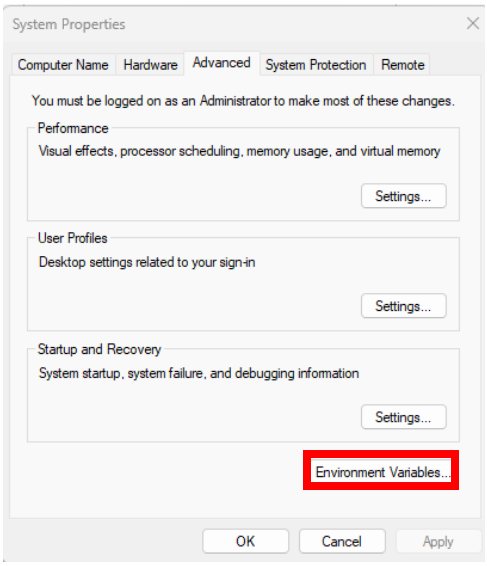
Locate the location of MySQL installation using the following steps Locate your local **Disk C** – **Program Files** - **MySQL** – **MySQL Server 8.0** – **bin** then copy the path as shown below. Can use Ctrl + C or right click and select copy.



Search for **Environment variables** on the windows search bar and click on open as shown.



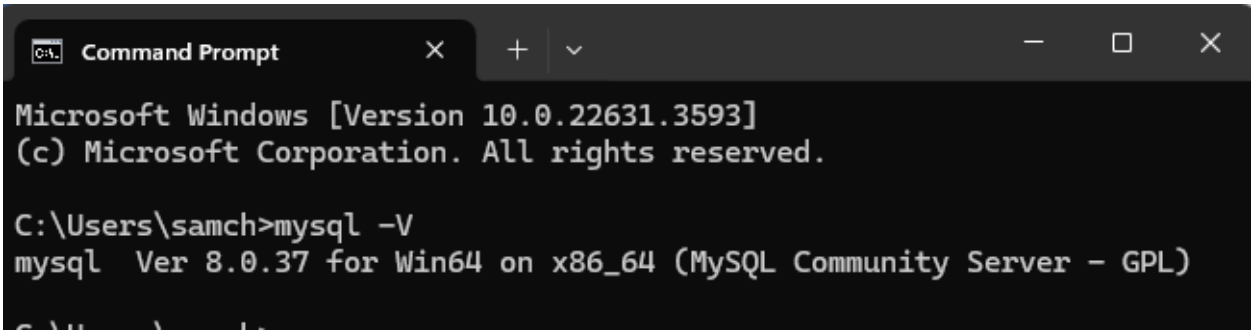
Select Environment Variables button



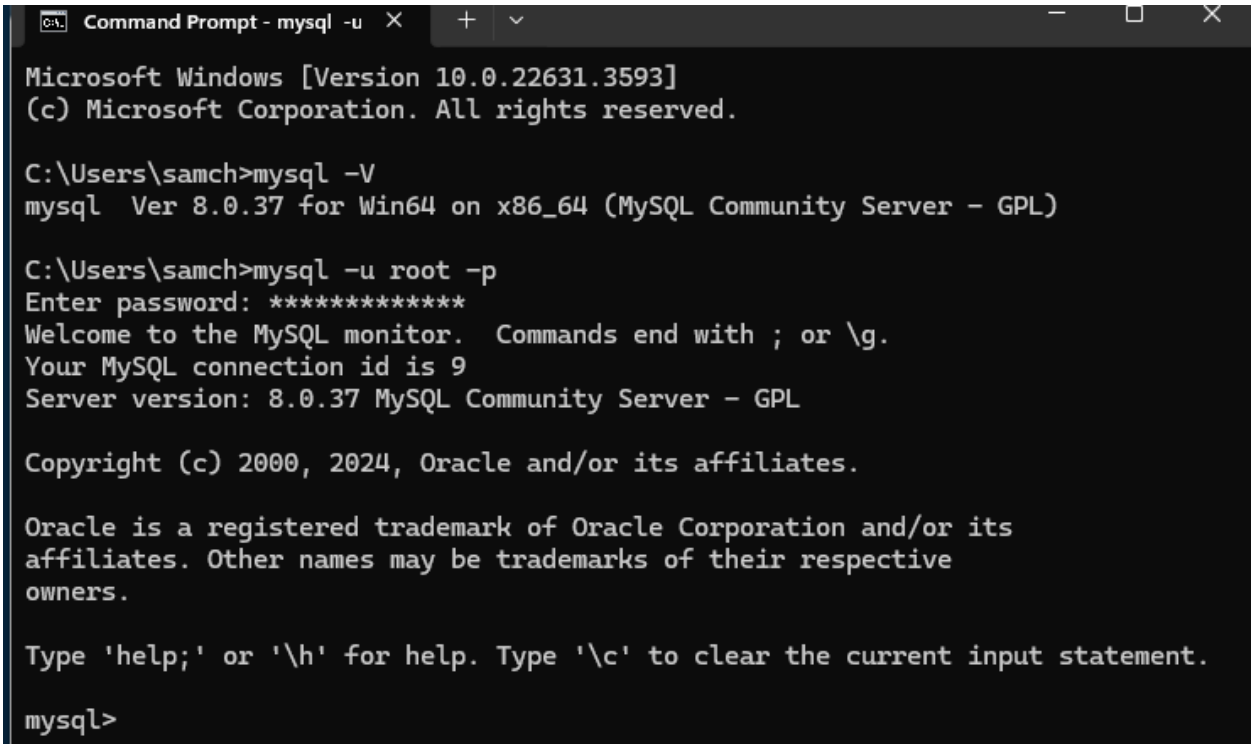
Click on **path** – **New** – Paste the path you copied for MySQL and then click OK on the three windows that opened.

Installation Verification

Open Command Prompt and type **mysql –version or mysql -V**
With successful installation you should have the following output on your command prompt as shown below.

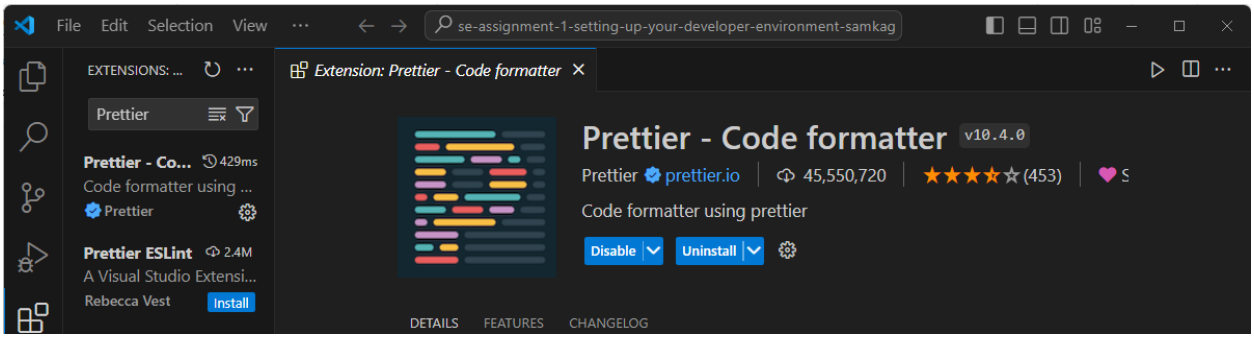


To open the MySQL server type **mysql -u root -p** and press enter. Type the root password you entered during installation and you should be able to have access to your server as shown below.



VS code Extensions and Plugins

Open Visual Studio Code – select the **extension icon** or use shortcut **Ctrl+Shift+X** – on the search bar type an extension like **Prettier** and click on the **install** button to install it as shown below.



Documentation by:

Samuel Kagunda