

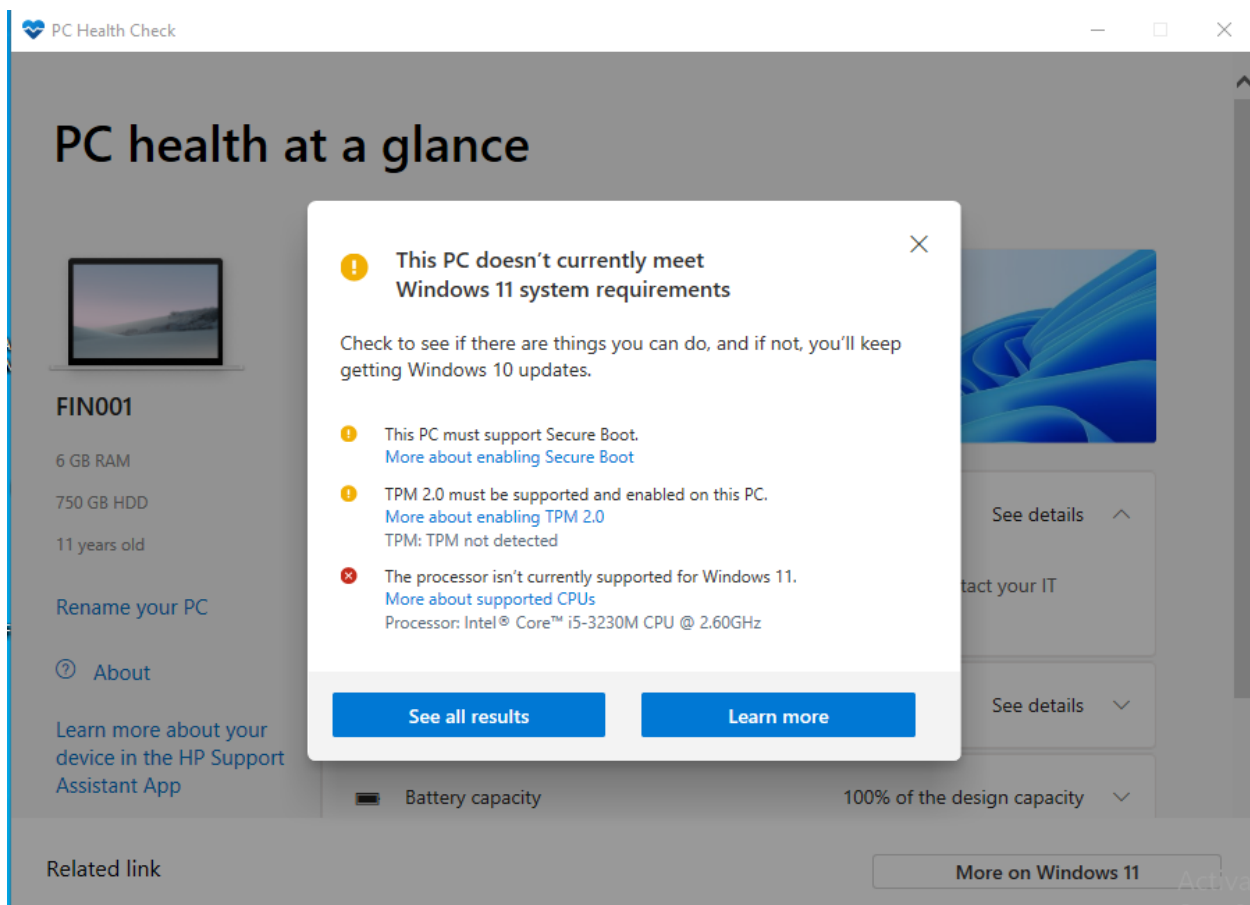
## 1. Select Your Operating System (OS):

Choose an operating system that best suits your preferences and project requirements. Download and Install Windows 11.

<https://www.microsoft.com/software-download/windows11>

Step 1: Systems check to verify if windows11 can be updated.

I performed a systems check to verify if my PC is compatible with a Windows11 OS. Unfortunately, My PC could not accept the upgrade. I however performed a systems update to ensure my Windows 10 is operating at optimum.



## 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>

Step 1: Download the latest VisualStudio Code from trusted site:

<https://code.visualstudio.com/Download>. Downloads are available for all the operating systems. Choose the one suitable for your machine. In my case, I chose VScode for windows download.

Step 2: Run installation following installation prompts. It is advisable to add VScode to the Open-with menu for ease of access.

Step 3: Open VScode to ensure it is running smoothly. Write your first code and save with a suitable name. eg "myFirstCode"

### 3. Set Up Version Control System:

Install Git and configure it on your local machine. Create a GitHub account for hosting your repositories. Initialize a Git repository for your project and make your first commit. <https://github.com>

Step 1: Install Git; download Git installer from a trusted website. Run installation instructions following the prompts.

Step 2: Create a Github account using a username of your choosing and a valid email address. After creating a Github account, create a repository where you can push your work.

Step 3: Configure Git; Open Git Bash to set up Git configurations. Set up user name and email using the commands below

```
git config --global user.name "Your Name"
```

```
git config --global user.email your.email@example.com
```

Step 4: Initialize local repository. From the project directory we have just created, navigate to the directory from the terminal. To initialize Git repository;

```
git init
```

Step 5: Make first commit and push to your repository. In our initialized terminal, we can commit our "myFirstCode" file. To do this we write the following in our terminal:

```
Git add .
```

```
Git commit -m "my first commit"
```

Access the repository using the link to the github account:

```
git remote add origin https://github.com/yourusername/your-repository.git
```

```
git branch -m main
```

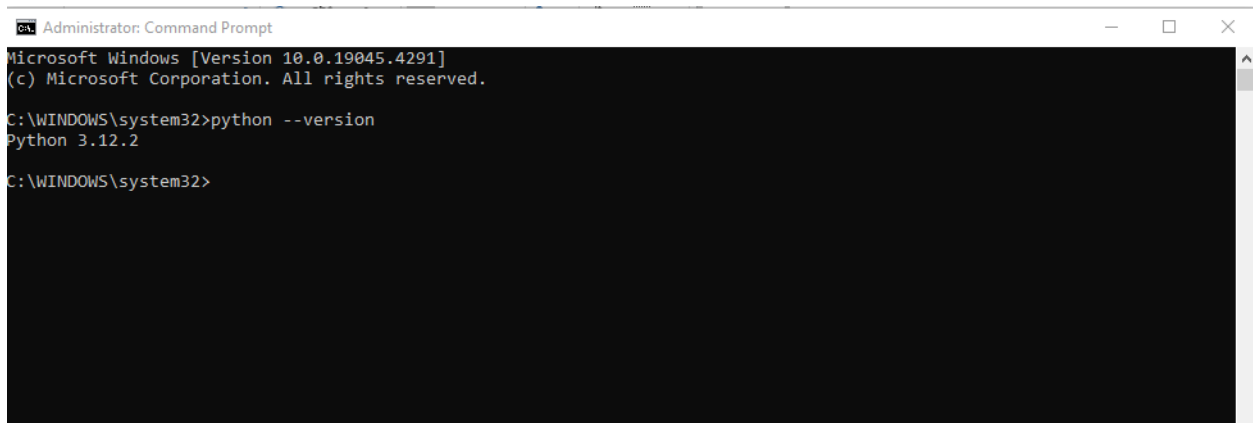
```
git push -u origin main
```

#### 4. Install Necessary Programming Languages and Runtimes:

Install Python from <http://www.python.org> programming language required for your project and install their respective compilers, interpreters, or runtimes. Ensure you have the necessary tools to build and execute your code.

Download python from a trusted website. Run the installation package following the instructions. Make sure to check the box that adds python to the path in the systems environment.

After installing python, verify the installation in the terminal.

A screenshot of a Windows Command Prompt window titled "Administrator: Command Prompt". The window shows the output of the command "python --version". The text displayed is: "Microsoft Windows [Version 10.0.19045.4291] (c) Microsoft Corporation. All rights reserved. C:\WINDOWS\system32>python --version Python 3.12.2 C:\WINDOWS\system32>".

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.19045.4291]
(c) Microsoft Corporation. All rights reserved.

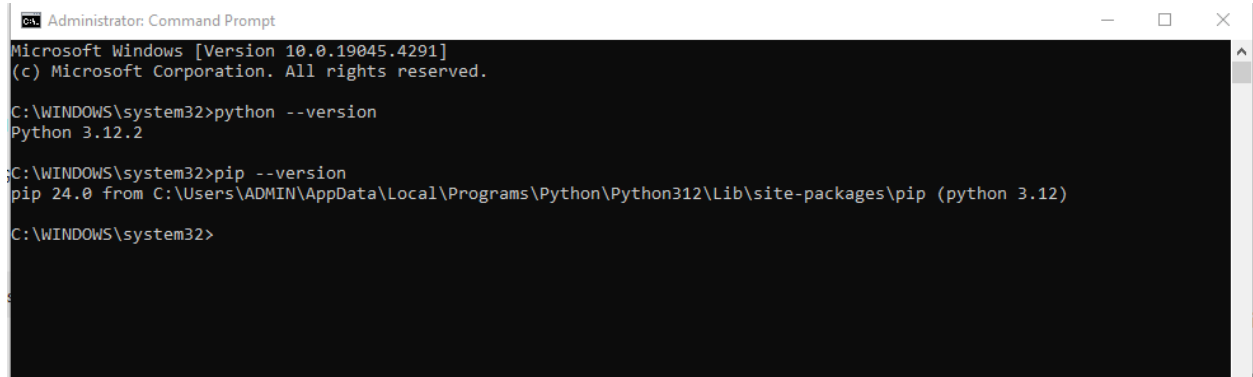
C:\WINDOWS\system32>python --version
Python 3.12.2

C:\WINDOWS\system32>
```

#### 5. Install Package Managers:

If applicable, install package managers like pip (Python).

Verify if pip is installed.

A screenshot of a Windows Command Prompt window titled "Administrator: Command Prompt". The window shows the output of the commands "python --version" and "pip --version". The text displayed is: "Microsoft Windows [Version 10.0.19045.4291] (c) Microsoft Corporation. All rights reserved. C:\WINDOWS\system32>python --version Python 3.12.2 C:\WINDOWS\system32> C:\WINDOWS\system32>pip --version pip 24.0 from C:\Users\ADMIN\AppData\Local\Programs\Python\Python312\Lib\site-packages\pip (python 3.12) C:\WINDOWS\system32>".

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.19045.4291]
(c) Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>python --version
Python 3.12.2

C:\WINDOWS\system32> C:\WINDOWS\system32>pip --version
pip 24.0 from C:\Users\ADMIN\AppData\Local\Programs\Python\Python312\Lib\site-packages\pip (python 3.12)

C:\WINDOWS\system32>
```

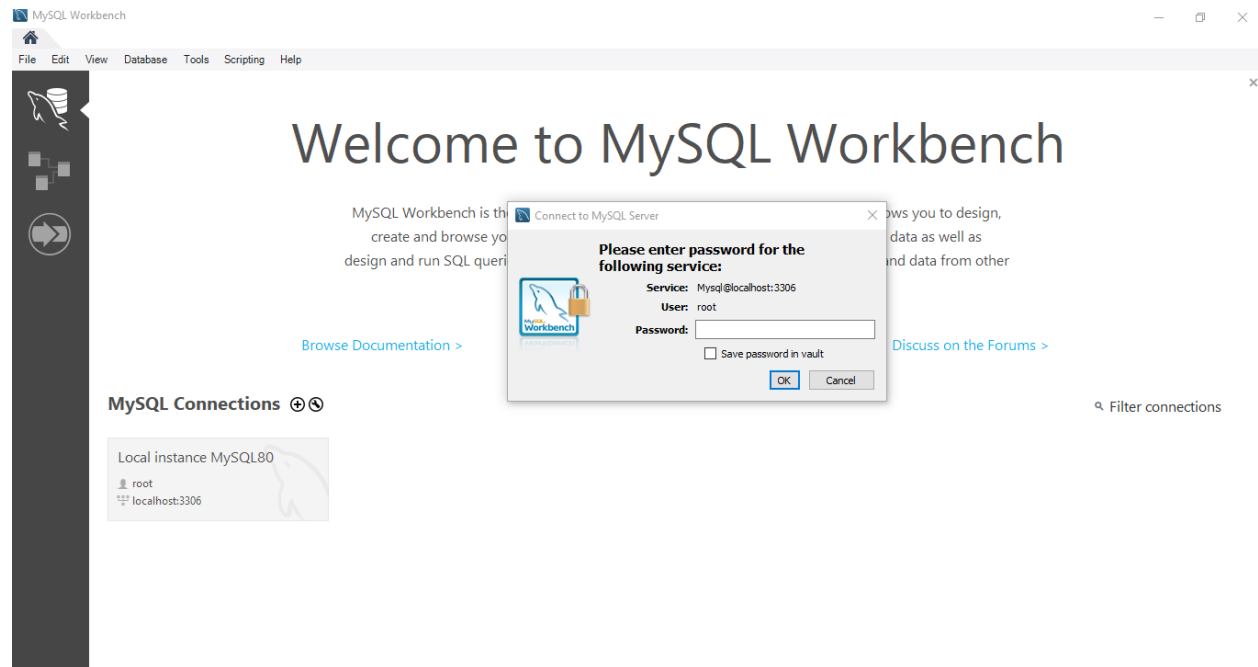
If pip is installed we can run a updated

## 6. Configure a Database (MySQL):

Download and install MySQL database.

<https://dev.mysql.com/downloads/windows/installer/5.7.html>

Download and install MySQL for windows following the setup steps and configure the server and set up password.



## 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.

In VScode, find extensions and install.

