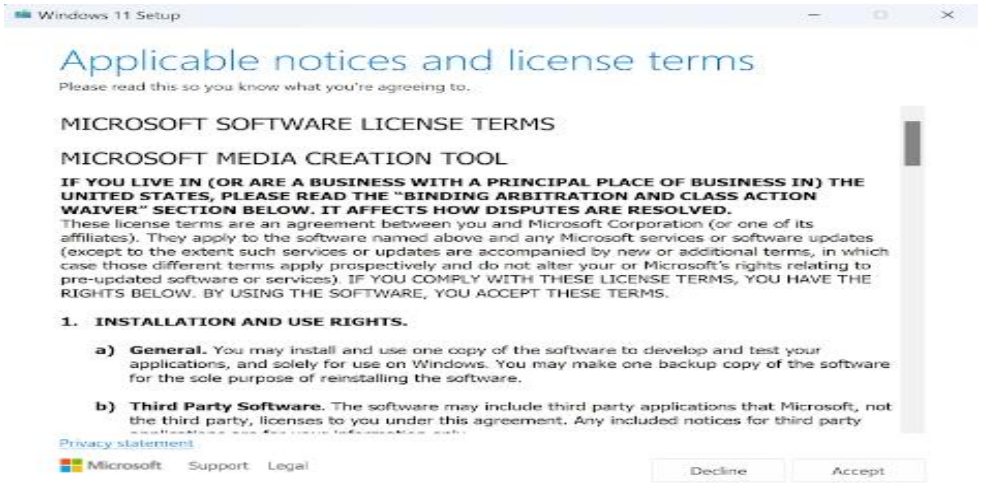
Installing Windows 11 with Bootable USB Media

Please ensure that you have the following:

- Internet connection
- Blank USB drive with a minimum of 8GB storage space.

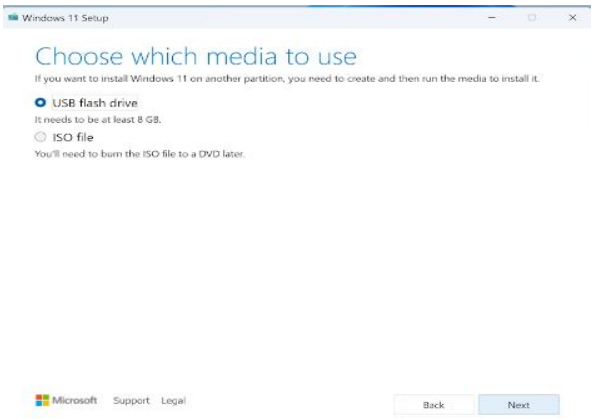
Creating Windows 11 Installation Media

1. Download the Media Creation Tool: Visit the Microsoft website
2. Run the Media Creation Tool as an administrator and agree to the terms and conditions.



3. Customize Download Options to suite your needs. You can also continue with the default configurations.

4. Select USB Drive you wish to use. It should have a minimum of 8GB of free storage. The USB drive will be formatted, so ensure that any important data is backed up in another drive or machine. Click next to start the process of creating the bootable media.



5. Create Bootable Media. This process is going to take some time.

6. Finish. Once complete, the USB drive will contain the bootable Windows 11 media.

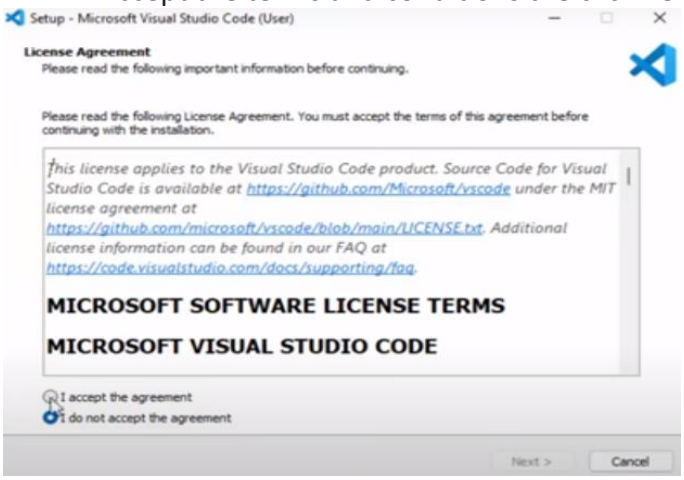
Clean Installing Windows 11

1. Attach the USB drive to the target PC and restart while holding the Shift key to enter the Windows Recovery Environment (WinRE). Choose to boot from the USB drive.
2. Select your language, time zone, and keyboard preferences.
3. Click "Install Now" and proceed through the on-screen prompts.
4. If reinstalling the same edition, select "I don't have a product key." Windows will automatically activate later with your Microsoft Account.
5. Choose the same edition verified on your PC in step 2.
6. Accept the Microsoft Software License Terms.
7. Select "Custom: Install Windows only (advanced)" as the installation type.

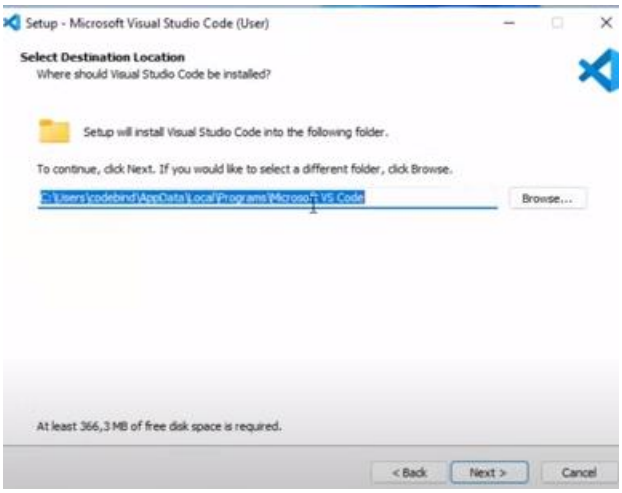
8. Select the hard drive where you want to install Windows
9. The installation process will begin.
10. Once Windows is installed, your PC will restart automatically.
11. Follow the prompts that appear to finish setting up your device.

Installing Visual Studio Code on Windows.

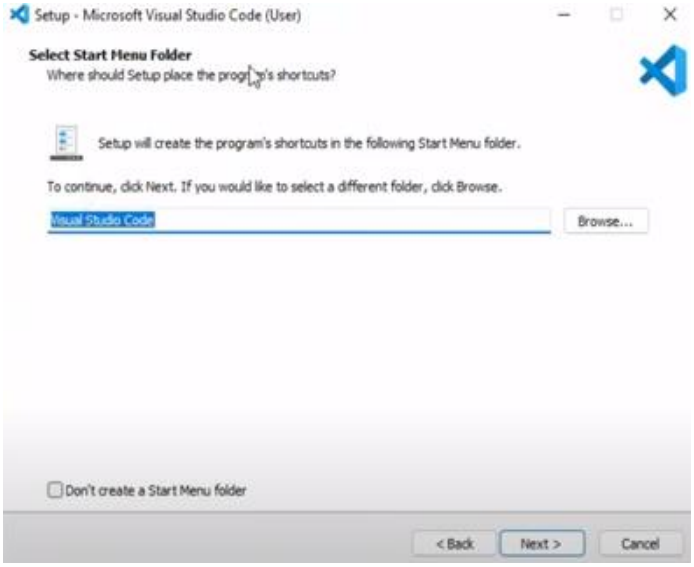
1. Visit the official site for visual studio code and download the installer.
   https://code.visualstudio.com/download
2. Download the installer.
3. Locate the downloaded file and run it as an administrator.
4. Accept the terms and conditions the click next.



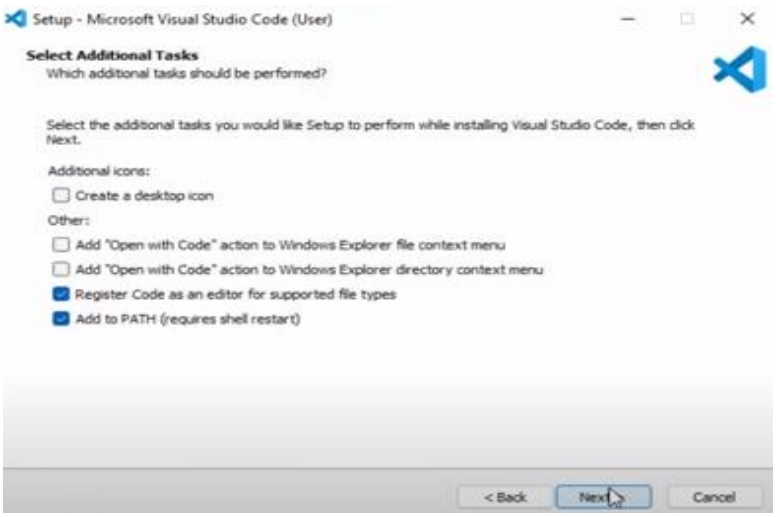
5. Choose the location you want to install the Visual Studio Code. You can also continue with the default location.



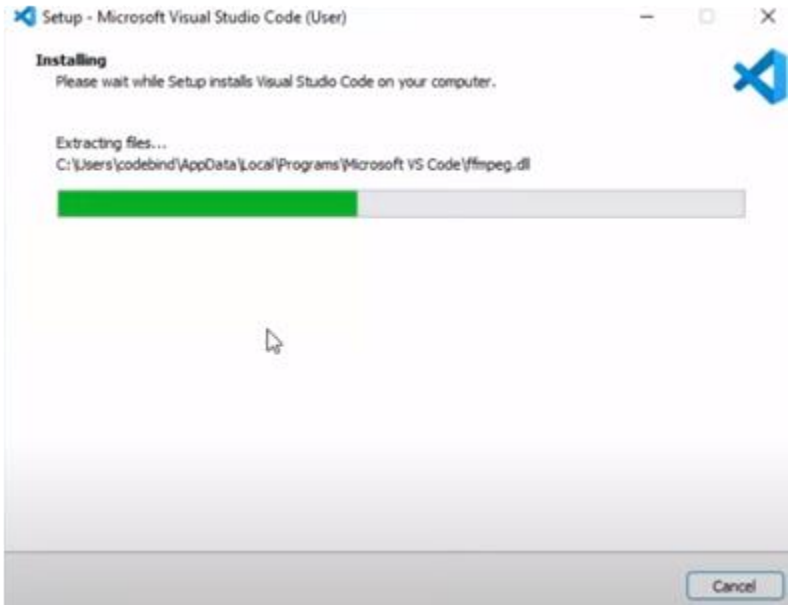
6. Select the start menu folder or leave it as default



7. Customize the installation settings if need be. You can also leave them as default.

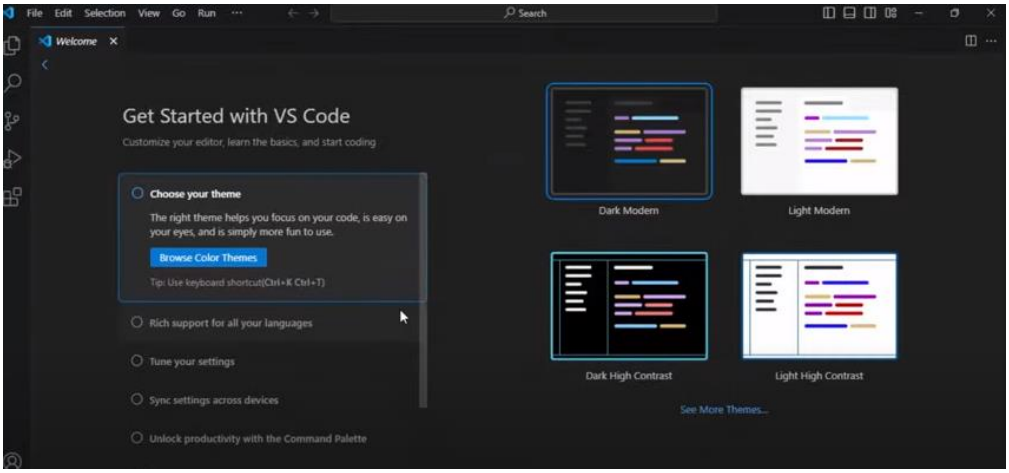


8. Click next then install and wait for Visual Studio code to be installed.



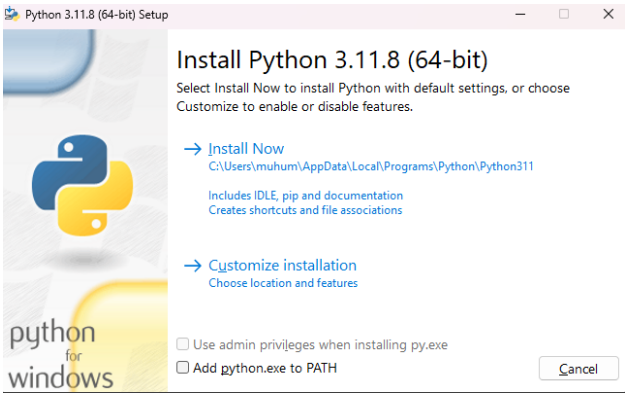
9. Once it's done, make sure the "launch visual studio code" checkbox is selected, then click finish.

10. Launch the visual studio code and select your favourite theme.

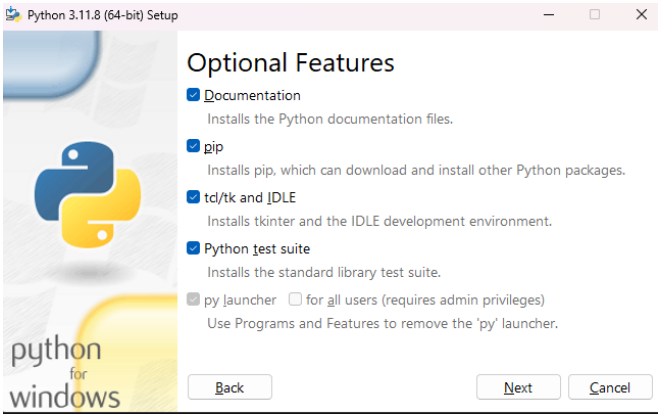


Installing Python.

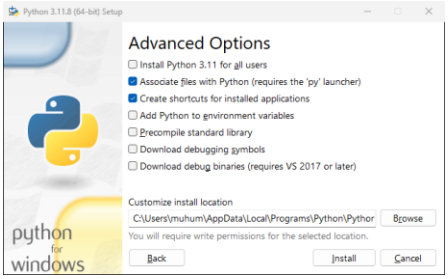
1. Visit the official Python for Windows download page: https://www.python.org/downloads/ and download the installer.
2. Locate the installer and run it as an administrator.
3. Click on customize installation.



4. Select the feature you want to install then click on next.



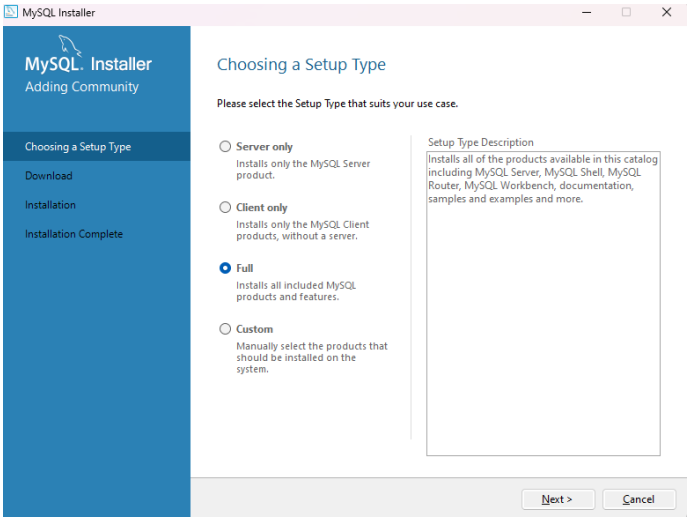
5. Select any advanced features you need to install and modify the installation location if need be, then click install.



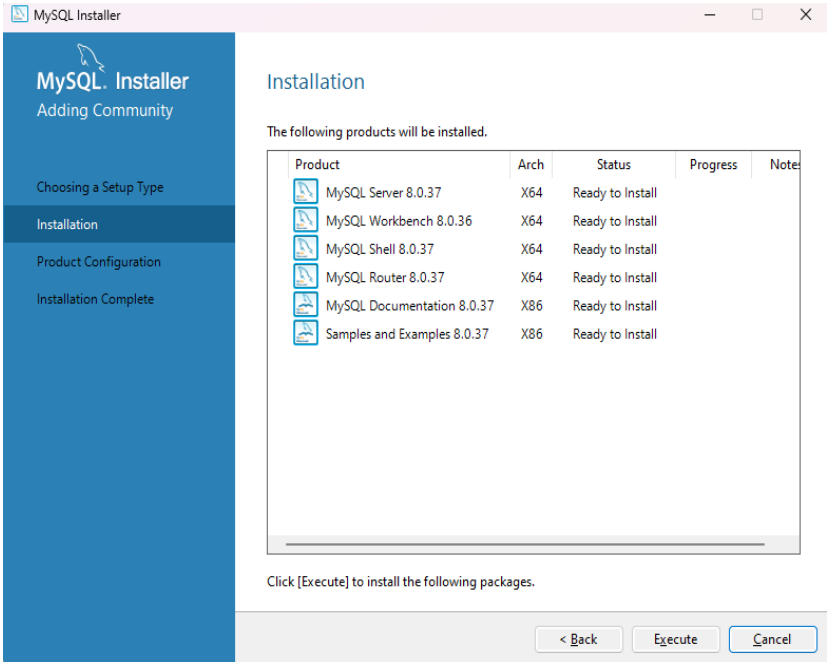
6. Wait for the installation to complete, then click finish. Open the command prompt and type ‘python –version’ to confirm if python was installed successfully.

Installing MYSQL

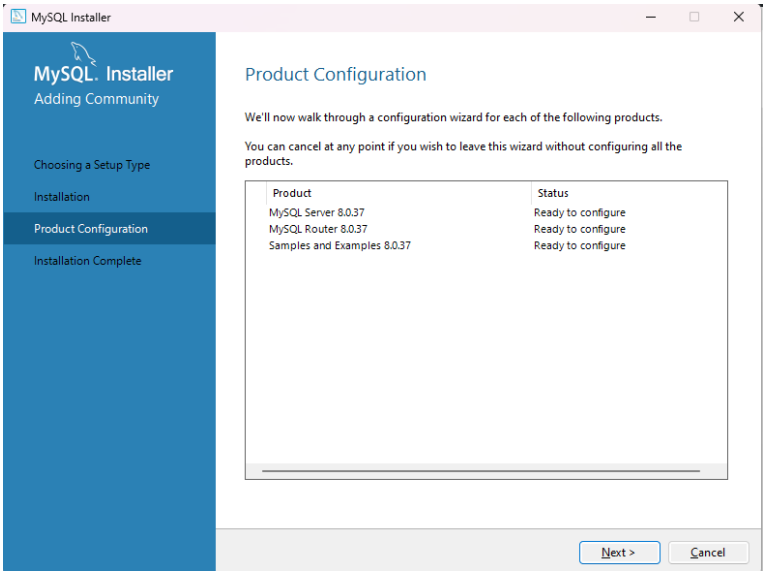
1. Visit the official site for MYSQL download page: https://dev.mysql.com/downloads/windows/installer/5.7.html and download the installer.
2. Locate the installer and run it as an administrator.
3. Choose full set up type , then click next.



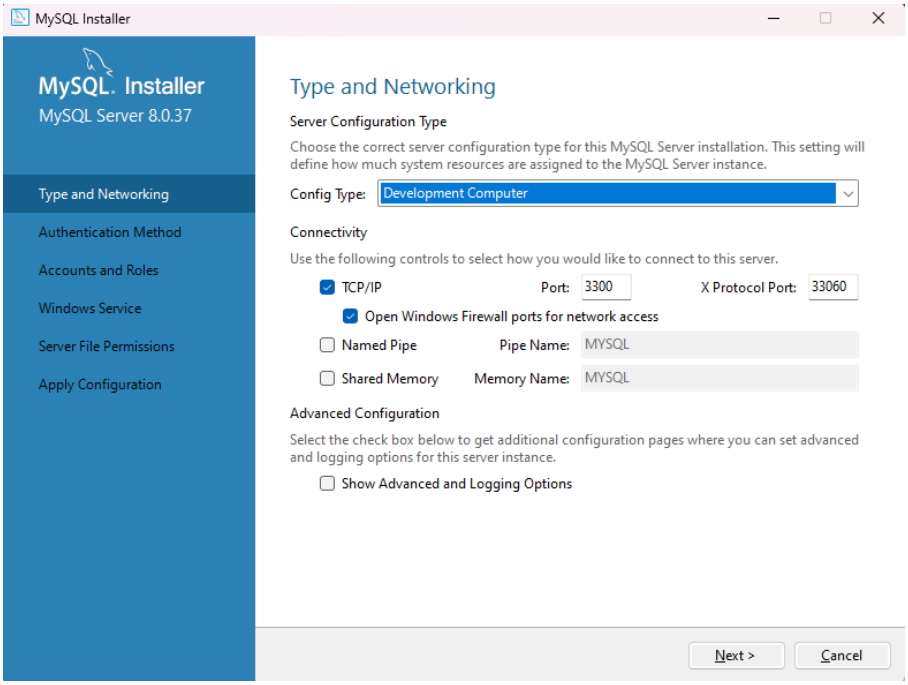
4. Click execute on the next pane that appears, then next.



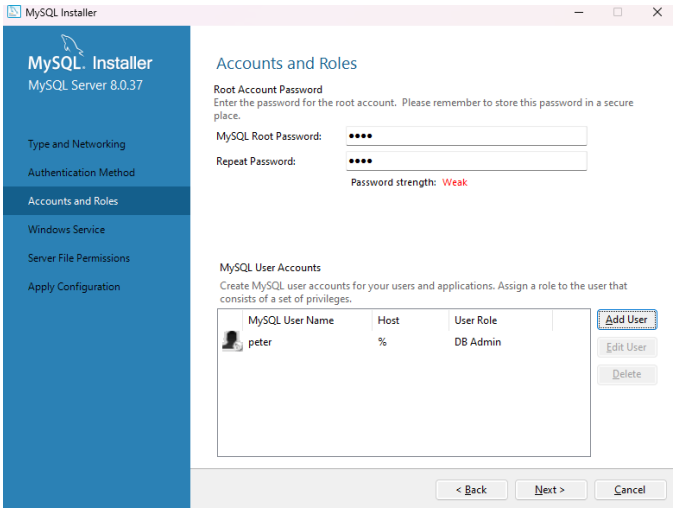
5. Follow the step-by-step procedure to configure the product.



6. Configure the port to be used as well as ensure the ‘config type’ is set to ‘Development Computer’ then click next.



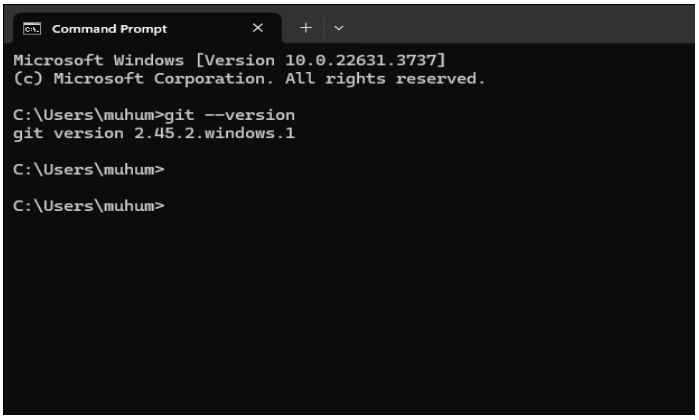
7. Choose your preferred authentication mode the click next.
8. Set up the root password and add a user if necessary.



9. Follow the rest of the instructions that follow to install MYSQL. You might consider using the defaults.

Installing GIT.

1. Visit the official Git for Windows download page: https://www.git-scm.com/download/win and download the installer.
2. Locate the installer and run it as an administrator.
3. The installer will guide you through the setup process. You can accept the default settings or if need be, customize them as per your needs.
4. Once the installation is complete, open a new command prompt window and type ‘git –version’ to confirm if the installation was successful.



CHALLENGES FACED WHILE INSTALLING THE DEVELOPMENT TOOLS.

1. Git:

- **Finding the Right Download:** There were so many download options, and I wasn't sure which one to choose for my Windows system. The abundance of choices caused initial confusion.
- **Using the command line interface:** I'm not a comfortable user with the command line. While Git itself is powerful, memorizing all those commands seems challenging, tedious and intimidating.
- **Locating the git folder challenge:** After initializing a local repository, I couldn't find the git folder immediately. It took some time, but thanks to Uncle Chatgpt, I was able to locate it.
- **Cloning and pushing challenges:** While not an installation hurdle, down the line, I faced challenges understanding complex Git concepts like cloning and pushing changes GitHub using the Git bash!

2. Python:

- **32-bit vs. 64-bit:** During Python download, I almost made a mistake by grabbing the wrong installer version. It took a moment to realize I needed the 64-bit version for my system to avoid compatibility issues later.
- **Adding Python to PATH:** The installation went smoothly, but I encountered a hurdle when trying to run Python scripts from the command line. I had to manually add Python to my environment variables. Again, thanks to Uncle Chatgpt.
- **Installing libraries using pip:** With my first Python project, I needed to install external libraries. I ran into several errors using PIP, but I finally was able to do so.

3. Visual Studio Code (VS Code):

- **Feeling Overwhelmed:** I was using VS code for the first time, and it just felt odd. I was uncomfortable with the interface, settings, and installing extensions. However, I later came to appreciate its' versatility as well as flexibility.

- **Too many extensions:** I initially had to install as many extensions as possible in my VS Code. This was because I found it challenging to identify the right extensions for me to use at any given task. This slowed down my editor and I had to reinstall the Visual Studio Code again.
- **Configuration settings:** Different and diverse editor settings made difficult to decide on the best settings for my editor. I ended up using the default settings and adjusted them step by step to avoid the confusion and intimidation I faced with my first editor.
- **Keyboard Shortcuts:** I always prefer using keyboard shortcuts in my work. I took up the challenge to learn as many keyboard shortcuts from VS Code as well as customizing my own.

4. MySQL:

- **Configuration Complexity:** Configuring MySQL involved creating databases and setting up users. The initial setup required some research to understand the process and choose the right options for my needs.
- **Security Concerns:** I forgot the password I had used during the installation process. I had to repeat the installation process all over again. It was frustrating.
- **Command Line vs. GUI:** MySQL offers both command-line tools and a graphical user interface (GUI) for administration. While the GUI offered a user-friendly interface, some advanced tasks still required using the command line. Learning the specific MySQL commands for various operations added another layer of complexity to the process.

5. Windows Operating System (Optional):

- **Choosing the Right Edition:** I had a challenge deciding whether to install Home or pro edition. Both looked quite similar. I ended up using the Pro version.
- **Driver Updates:** After a fresh Windows install, finding and installing the necessary device drivers can be time-consuming. Some specific hardware required manual driver installation. Identifying the correct drivers for my specific hardware configuration was a nightmare.
- **Windows Updates:** The first time I installed the updates resulted in some incompatibility issues. I had to uninstall all the updates and reinstall them again. Luckily for me, the second time worked perfectly.

- **Windows Defender:** Windows defender interfered with some of the new programs I installed. I found it quite frustrating and inconvenient at first but I was able to go about it at last. I ended up wasting a lot of time trying to reconfigure the programs to run as expected.