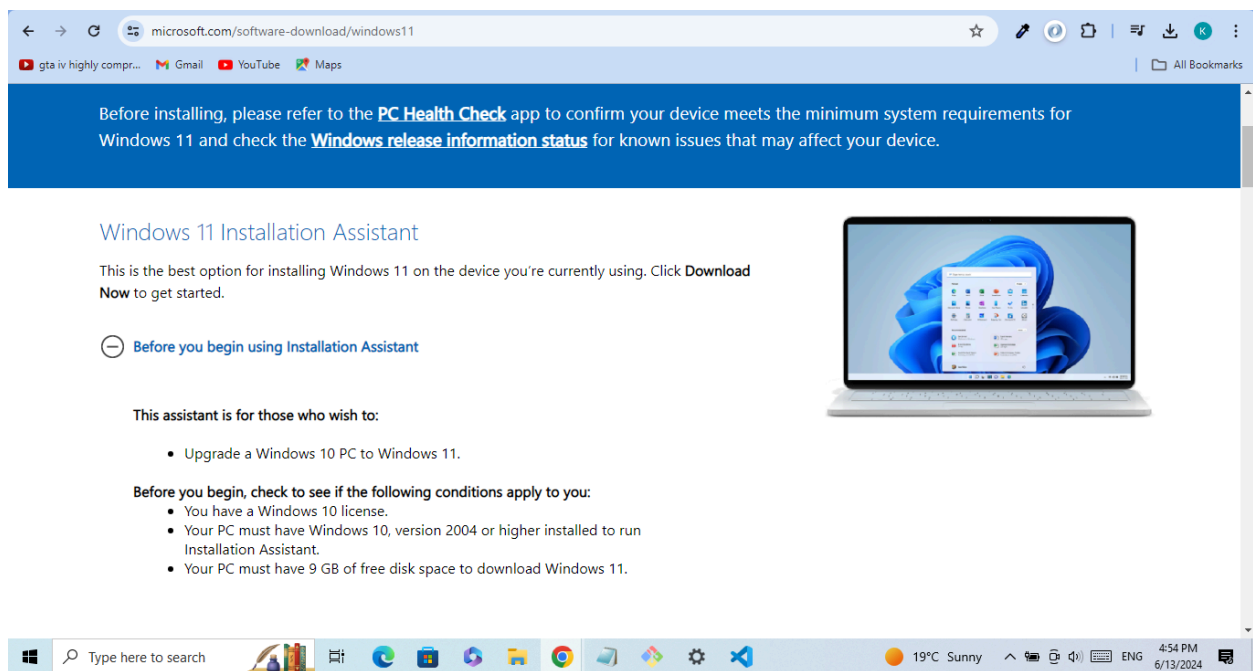# ASSIGNMENT 1
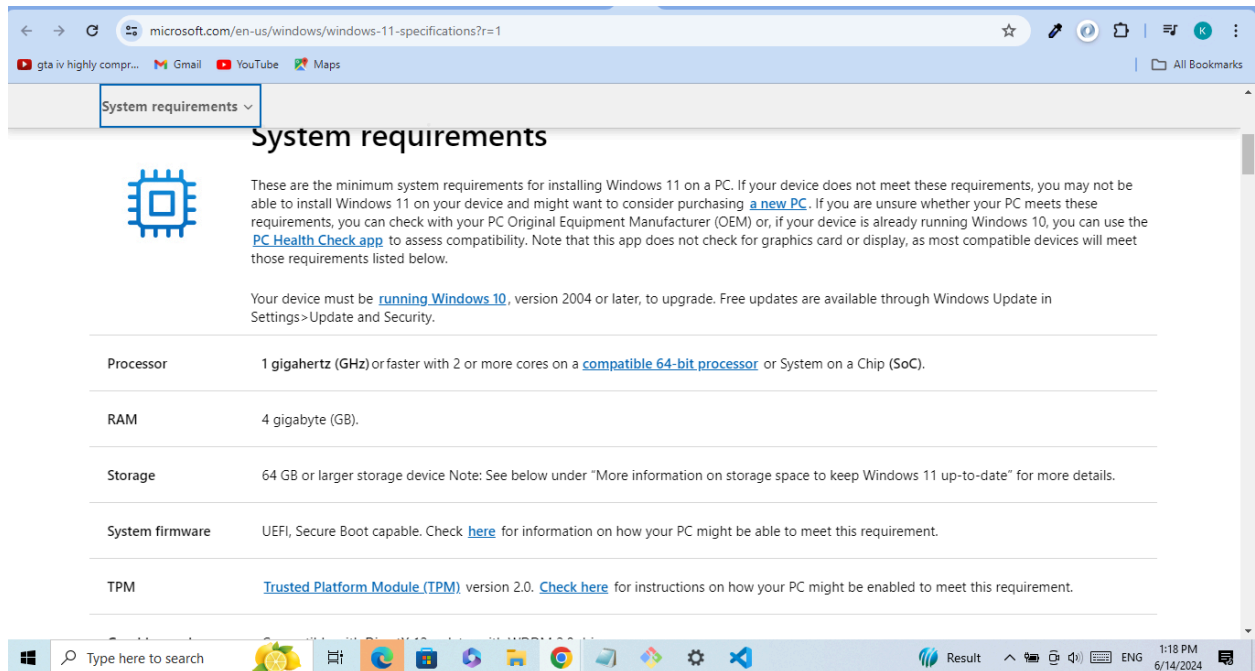## MY SETUP DOCUMENT

 1.The operating system that I chose is Microsoft Windows and I am currently running on Windows 10. Windows is one of the most popular operating systems and is usually preloaded in many operating systems.

To download windows 11, I navigated my way to https://www.microsoft.com/software-download/windows11 official page.I started off by reading the requirements for downloading windows 11 on my pc and unfortunately my pc does not meet the specifications.

System requirements

These are the minimum system requirements for installing Windows 11 on a PC. If your device does not meet these requirements, you may not be able to install Windows 11 on your device and might want to consider purchasing a new PC. If you are unsure whether your PC meets these requirements, you can check with your PC Original Equipment Manufacturer (OEM) or, if your device is already running Windows 10, you can use the PC Health Check app to assess compatibility. Note that this app does not check for graphics card or display, as most compatible devices will meet those requirements listed below.

Your device must be running Windows 10, version 2004 or later, to upgrade. Free updates are available through Windows Update in Settings>Update and Security.

Processor	1 gigahertz (GHz) or faster with 2 or more cores on a compatible 64-bit processor or System on a Chip (SoC).
RAM	4 gigabyte (GB).
Storage	64 GB or larger storage device Note: See below under "More information on storage space to keep Windows 11 up-to-date" for more details.
System firmware	UEFI, Secure Boot capable. Check here for information on how your PC might be able to meet this requirement.
TPM	Trusted Platform Module (TPM) version 2.0. Check here for instructions on how your PC might be enabled to meet this requirement.

2.To install a Text Editor or Integrated Development Environment suitable for my programming languages and workflow.I navigated my way to https://code.visualstudio.com/Download to download Visual Studio Code.
Once I landed on the page I clicked on the windows icon to download for windows and after I clicked I got an option proceed to ask which drive I want to store the file into.Ran the installer in C:\Users{Username}
AppData\Local\Programs\Microsoft VS Code. Followed the prompts and next thing I know it VS Code was successfully installed on my PC and I took the liberty to explore Visual Studio Code and added Extensions to enhance the functionality of the editor.

Setup - Microsoft Visual Studio Code (User)

Select Destination Location
Where should Visual Studio Code be installed?

Setup will install Visual Studio Code into the following folder.

To continue, click Next. If you would like to select a different folder, click Browse.

C:\Users\kcrca\AppData\Local\Programs\Microsoft VS Code   Browse...

At least 376.2 MB of free disk space is required.

< Back   Next >   Cancel

Download Window

There are 3 options below for inst   the best option for you.

Before installing, please refer to th   stem requirements for
Windows 11 and check the **Wind**   vice.

Windows 11 Installation As

This is the best option for installing Wind
Now to get started.

⊕ Before you begin using Installation

Download Now

Create Windows 11 Installation Media

Type here to search

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

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

| ↓ **Windows** Windows 10, 11 | | ↓ **.deb** Debian, Ubuntu | ↓ **.rpm** Red Hat, Fedora, SUSE | ↓ **Mac** macOS 10.15+ |

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

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

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

Type here to search

20°C Sunny   ENG   4:01 PM 6/13/2024

```html
<!DOCTYPE html>
<html Lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Product List</title>
</head>
<body>
<h1>Products</h1>
<ul>
    {% for product in products %}
    <li>
        <h2>{{product.name}} </h2>
        <p> {{product.description}}</p>
        <p> Price: {{product.price}}</p>
        <img src="{{product.image.url}}" alt="{{product.name}}"/>
    </li>
    {% endfor %}
</ul>
</body>
</html>
```
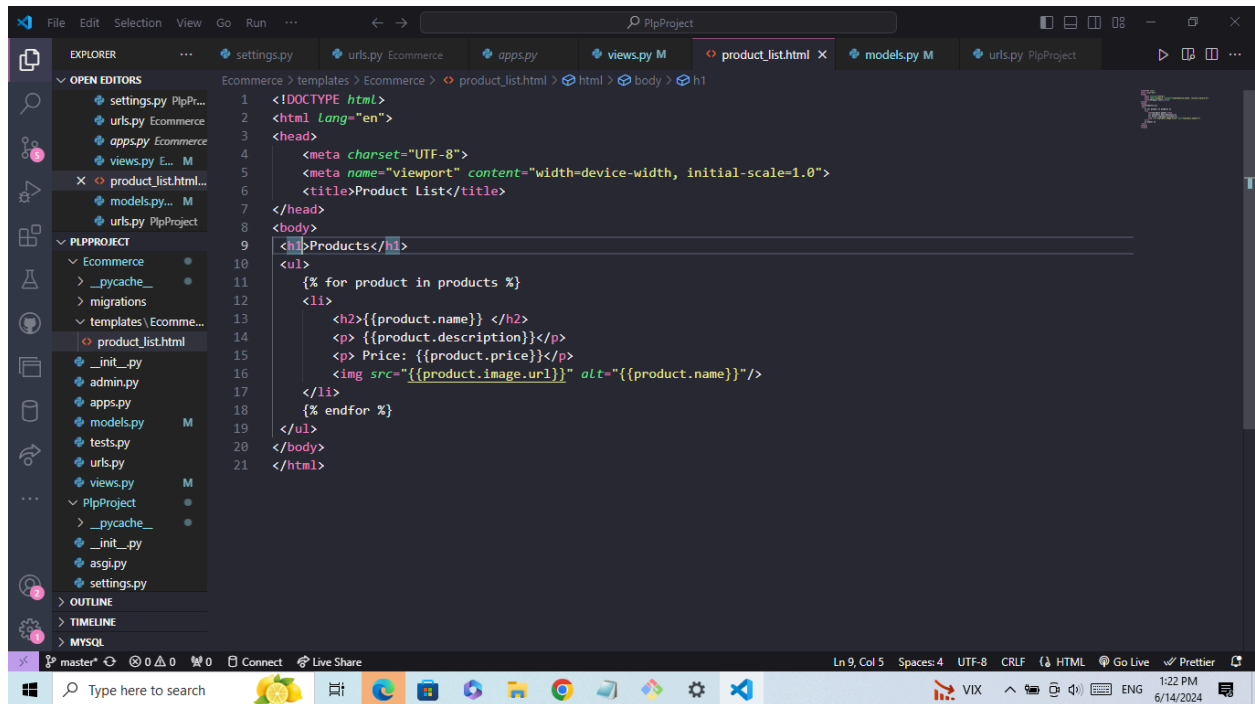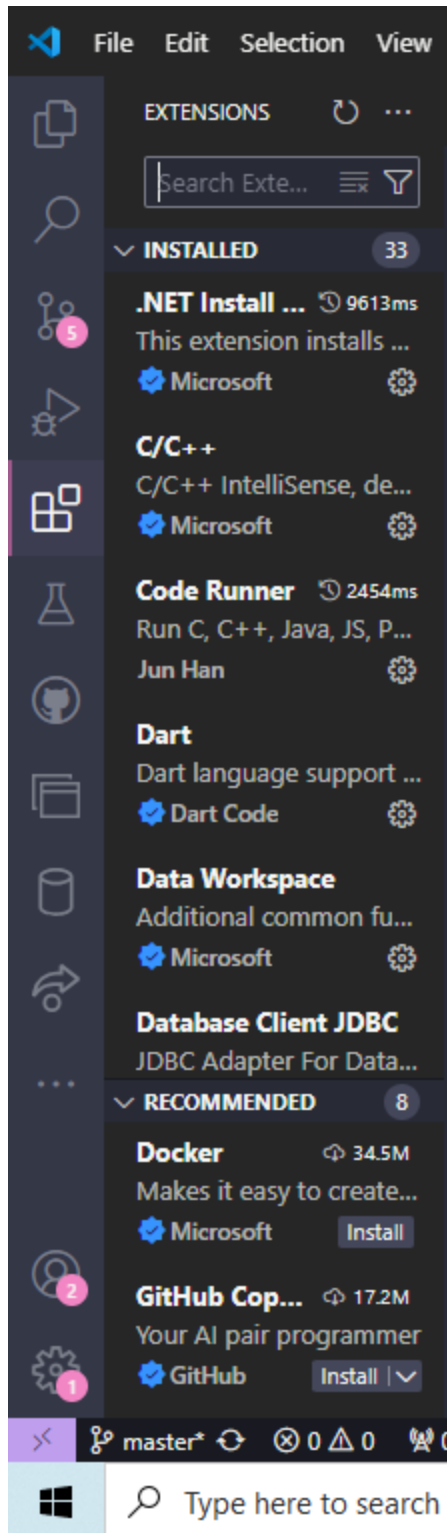
3.To setup Git as my Version Control System I navigated to https://www.git-scm.com/download/win Git official page, once landed on the page I clicked on the 'Click here to download' windows option.I downloaded Git for my os,

then ran it as admin and kept clicking next until installation.
Once installed I had to cd into the drive I want to work in, create a directory with a name, cd into the directory I created. I initialized vi hi.py, pressed the letter 'i' for insert, created a code inside the file.
I then esc +q +w to go back to the terminal. I already have an existing Github account so I navigated my way to Github to create a new repository
 I proceeded to configure git with my user information by opening a command prompt and set my username and email address.I verified my Git configuration by running git config --global --list. I made a git initialization, git add all so that all files can be added and then I did a git commit and passed in my message, went back to Github to copy the git remote add origin with a Url command and then pasted it in Git. Since my default branch was master instead of main, as the last step I did a git push -u master.
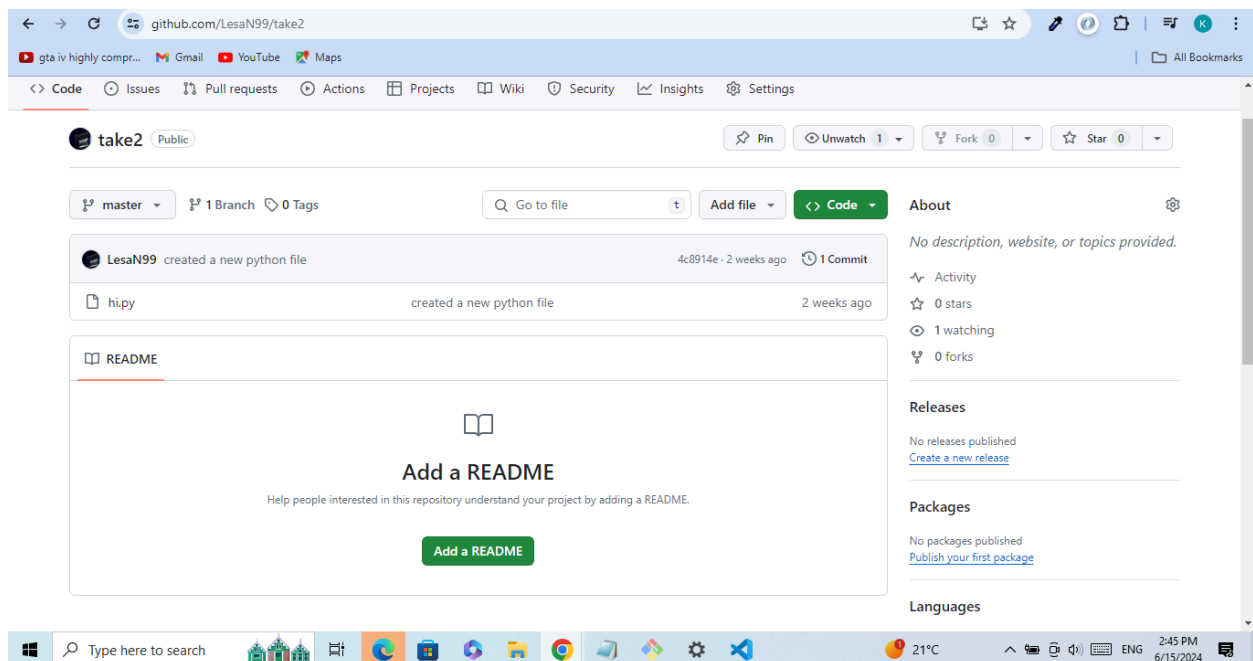
4.To Install Python I navigated to the python official webpage http://wwww.python.org. Click on the downloads option and then clicked on the the download python latest version 3.12.4 for windows.After the downloading process was done, I checked the "Add Python to Path" box, clicked install now, installed it and then verify the installation I went to command prompt, typed python - -version and got the version I installed. I went to environmental variables to also check if Python was added to my path.
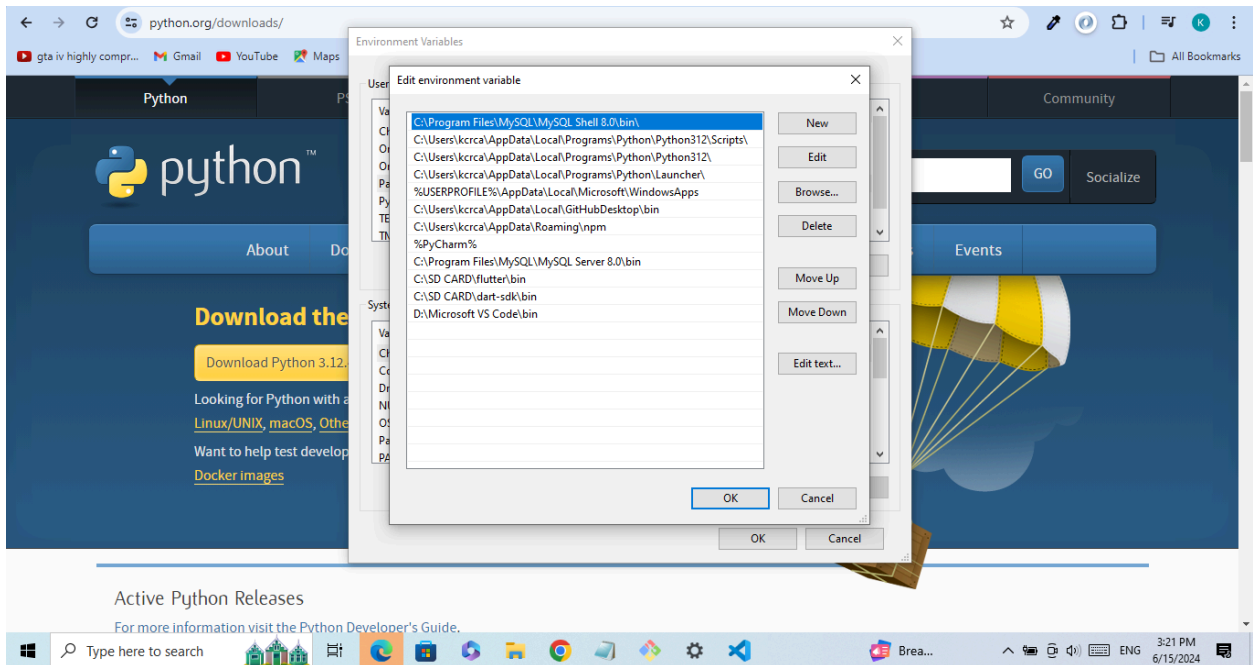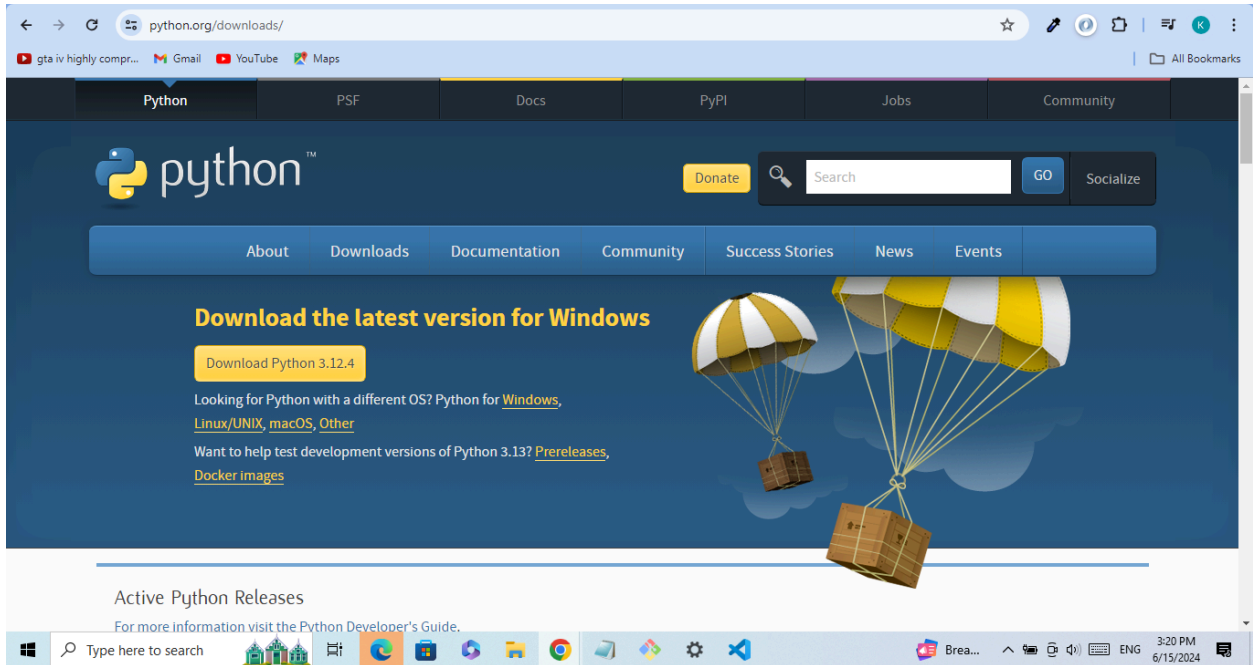
```
Microsoft Windows [Version 10.0.19045.4529]
(c) Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>python --version
Python 3.12.3

C:\WINDOWS\system32>
```

5.I did not install Python (pip) because I did not have any problems with it, instead when I ran the pip --version command, it ran successfully. Pip is the default package manager for Python and it is usually installed with it, so that might be the case to why I did not get problems and did not have to manually download it either.

6. To download MySQL installer I navigated to the MySQL official download page and selected and downloaded the full installer for windows. To install MySQL I ran the download as administrator, chose the Custom option on the setup type, selected the MySQL server and other desired products to install and then went through the installation steps to set up MySQL, including getting a root password.I set up MySQL as a windows service and left it on the 3306 default port. After the installation was done, I verified by starting the MySQL server.

```
Enter password: *************
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 9
Server version: 8.0.37 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| plp_academy        |
| sakila             |
| sys                |
| world              |
+--------------------+
7 rows in set (0.36 sec)

mysql>
```

7. I did not separately set up development environments and virtualization using tools like Docker because I am not familiar with doing so but I am yet to learn on how to do it and what are the benefits of it.

```
C:\WINDOWS\system32>docker --version
'docker' is not recognized as an internal or external command,
operable program or batch file.

C:\WINDOWS\system32>
```

8. To enhance functionality on my text editor, I clicked on extensions (square to the left side) in Visual Studio Code and started off by doing a search for Prettier extension and clicking install. Then in my preferences,I searched for "Format" and check Format on paste and Format on save and search for "Default Formatter" and selected Prettier - Code formatter or esbenp.prettier-vscode and then rebooted VS Code and now I am enjoying the auto-formatting. I proceeded to add other extensions like Dracula, Live server, Live show and many more.
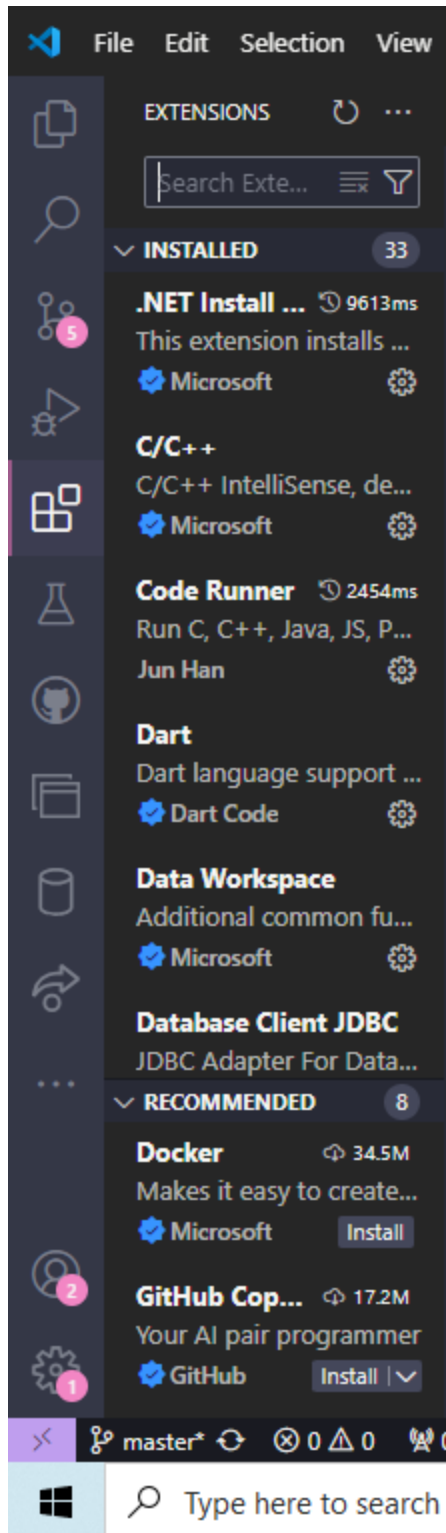
DIFFICULTIES I ENCOUNTERED DURING THE SETUP
- Challenge number 1 would have to be the setting up of Git. The downloading process was smooth but having to initialize the process on the terminal proved difficult since it

was my first time doing it and I found myself passing wrong commands during the process. To overcome the challenge I watched some YouTube tutorials and then proceeded to watch the Power Learn Project environmental setup session conducted by David Ouma recording on how to go about setting it up and the configuration process.

- Challenge number 2 would have to be the configuring of a DataBase. The downloading of MySQL,Dart and Flutter was really long and confusing . There are just so many options to select and edit and if you make one mistake you will find yourself having to manually install packages , since not doing so will result in discrepancies in efficiently running your DataBase. The confusing process made me wait a day or 2 before downloading anything just to make sure I did everything accordingly so I took the means to watch recordings on how to go about setting everything up and everything was successful.
- Challenge number 3 would have to be the downloading of windows 11 on py PC. When I was about to download I took the liberty of checking the requirements needed and tried to clear some space on my local drive but unfortunately it was not a successful process. To overcome this I decided to continue to operate on windows 10 and so far I have not encountered any difficulties with the installation of various packages and apps.