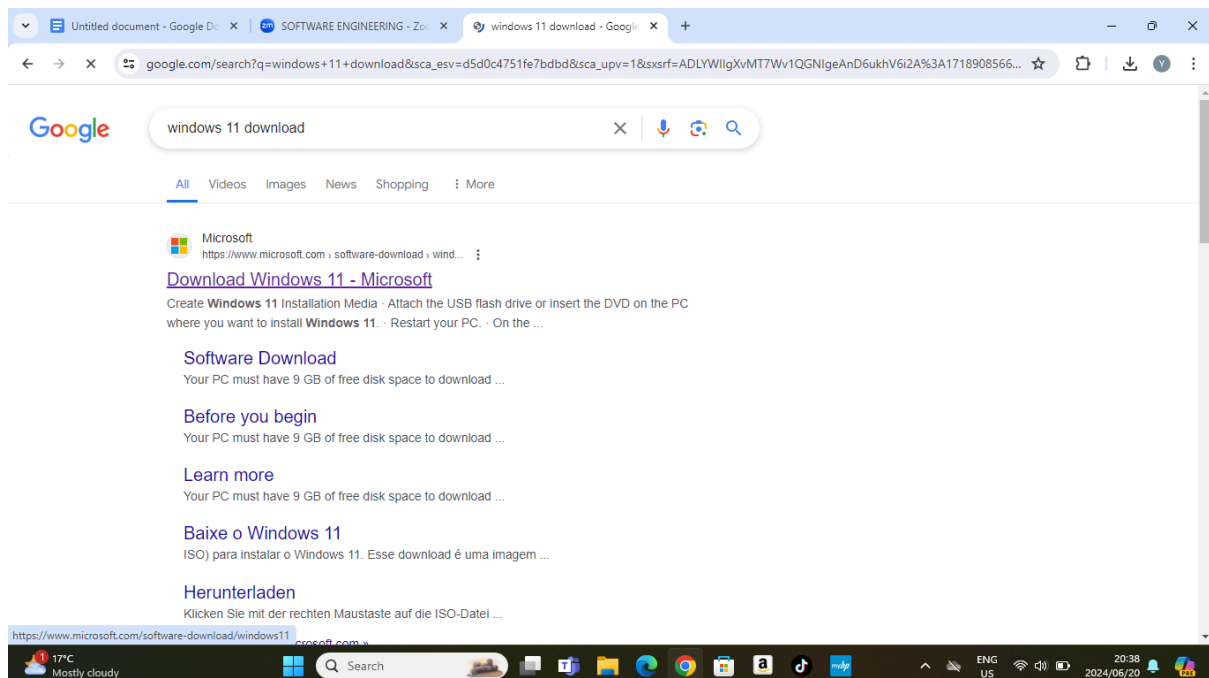


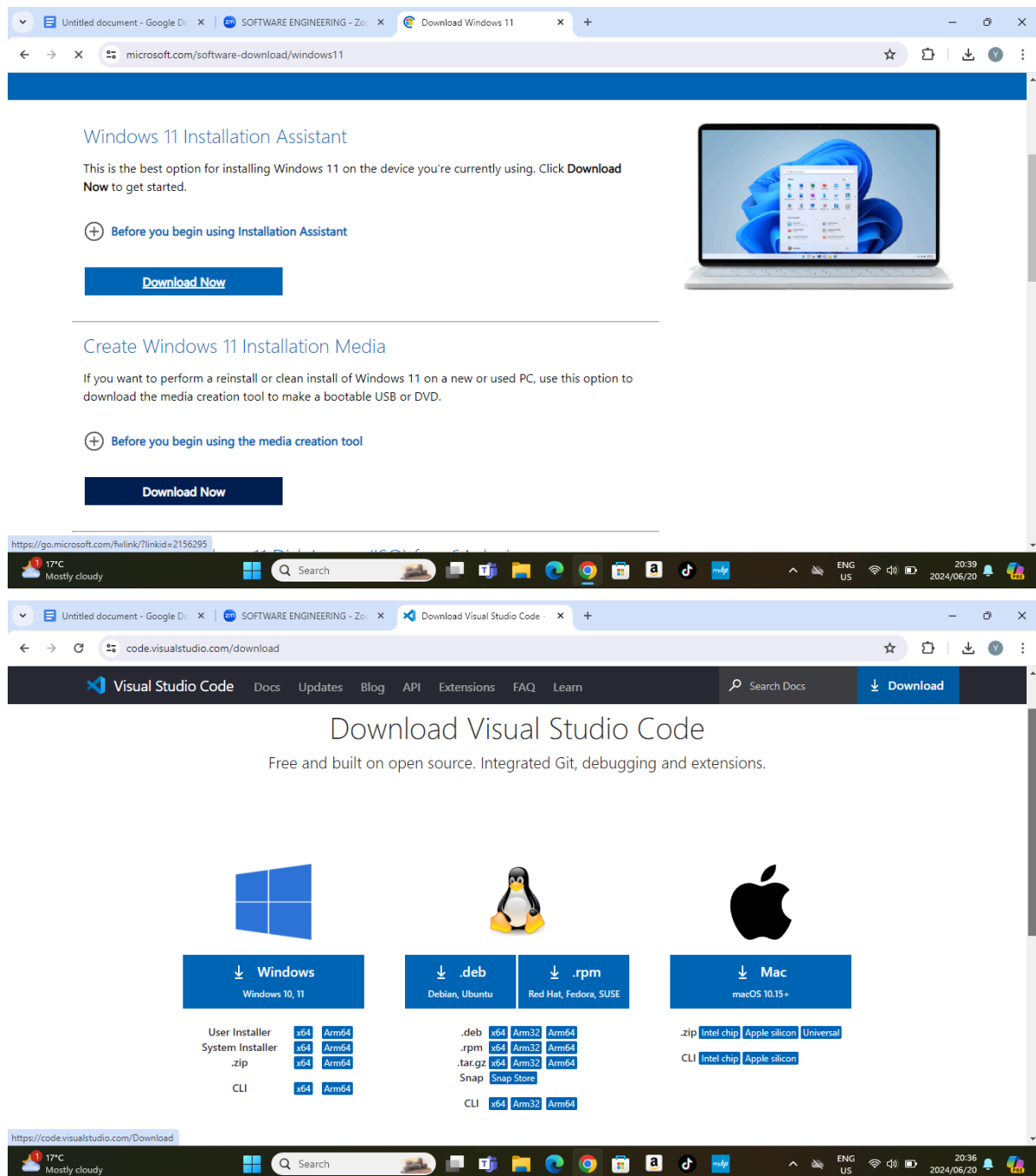
1. Operating System

An Operating System is a software that manages computer hardware and provides common services.

My local machine has windows preinstalled with init, the Operating System that I use is Windows. Before performing the install, I first ran a PC health check on my local machine to see if it will support Windows 11.

For the install, I typed windows 11 on chrome search engine, then clicked on www.microsoft.com, it was top of the search and I selected it as it had the microsoft logo. After clicking on microsoft.com, it takes you to the website, you are then redirected to software download. Once you get to software download, there will be three download options, one is Windows 11 installation assist, second is Create Windows 11 installation Media and last one is Download Windows 11 Disk Image (iOS) for x64 devices. I selected "Create Windows Installation Media " by clicking download under it and began the install in the USB drive inserted in my local machine.





Once done, the download takes you to the “Setup page” Application notice and Licence terms. At the bottom of the Windows 11 setup popup page there are two options “Decline and Accept”, clicked accept.

Getting a few things ready will appear on the pop-up page. Next step:

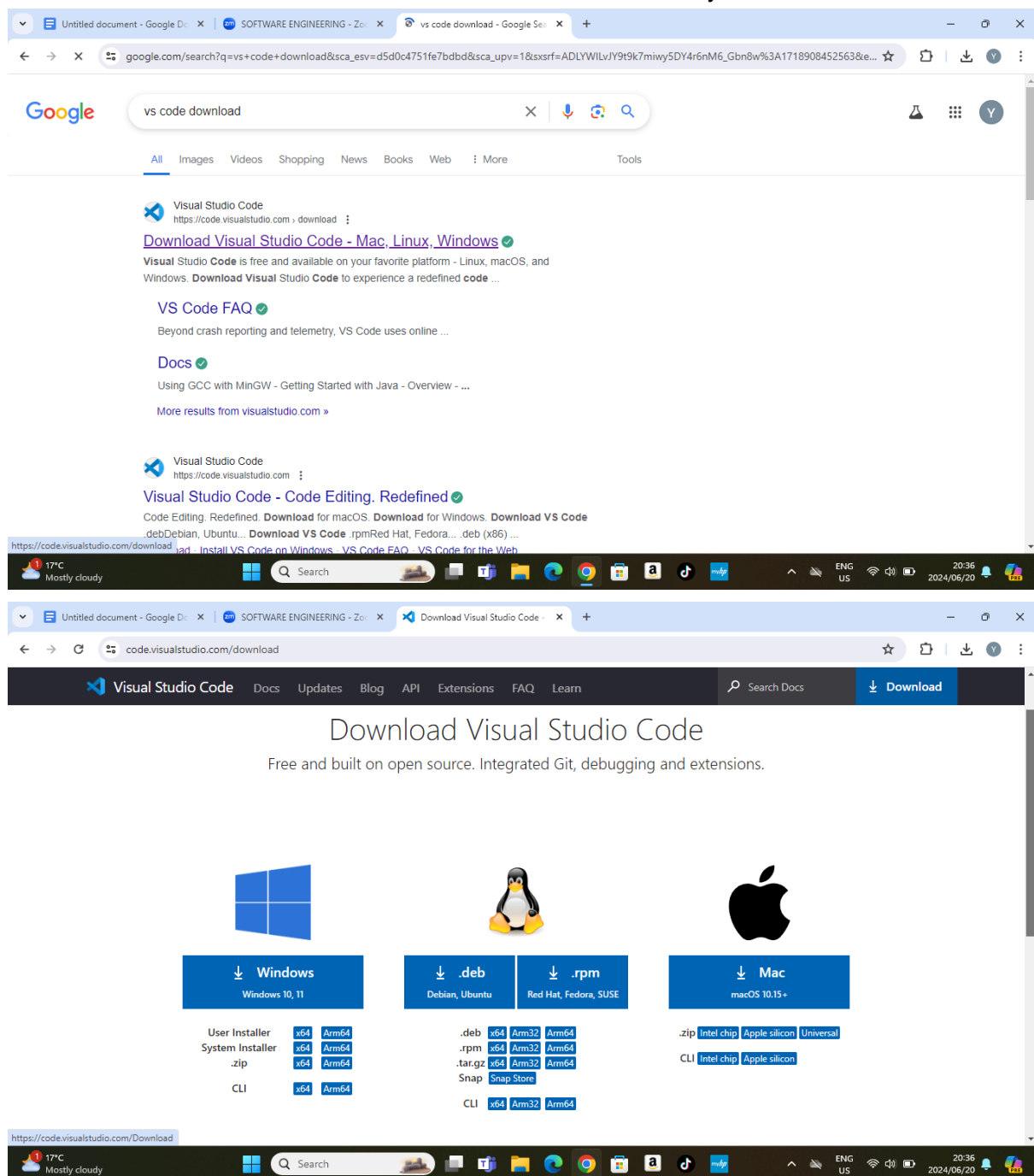
- select language and edition and click next
- Choose which media to use, left it on USB drive, click next
- Select a USB drive then insert a USB drive on my local machine and click under Removable drive= D:(Windows11)

Next “Get a few things ready” will appear, download Windows 11 begins. It will then verify and create Windows 11 media on the USB drive . After downloading, click finish.

USB drive boot on BIOS for a reboot. Phoenix Bios setup utility table and click on the boot column. Removable devices will appear on the Boot column, press F10 to boot the USB drive. Windows setup pop-up page indicates successful boot to USB drive. Select language, click next then install. Select South Africa as my country, then click on skip. Updates made, local machine restarts with USB drive now removed from the PC. Click on personal use, then i had to enter my Microsoft login details. Enter name for my Device, download complete.

2. Visual Studio Code

Go to the web browser and typed www.visualstudio.com. VS code editor is top of the list on the search with the official website, click on it and it will take you to Current version 1.74.



- Scroll down and click on download windows. Once download is complete, minimise the download screen.
- A setup page will appear of “Microsoft Visual Studio code” licence agreement. Click on “I accept the agreement” then click next.
- Select destination location, i did not make changes, click next
- Select additional tasks, click on every box under other then click next.

Install, once done click on finish.

3. Version Control System

Version control, also known as source control, is the practice of tracking and managing changes to software codes. One of the Version controls is Git.

Install Git on Windows

The top screenshot shows a Google search for "git for windows". The search results include links to the Git download page, GitHub guides, and other resources. The bottom screenshot shows the "Download for Windows" page on the Git website. It provides instructions for downloading the latest 64-bit version (2.45.2) and includes a section for using the winget tool to install Git.

Download for Windows

Click here to download the latest (2.45.2) 64-bit version of Git for Windows. This is the most recent maintained build. It was released 17 days ago, on 2024-06-03.

Other Git for Windows downloads

- Standalone Installer
- 32-bit Git for Windows Setup.
- 64-bit Git for Windows Setup.
- Portable ("thumbdrive edition")
- 32-bit Git for Windows Portable.
- 64-bit Git for Windows Portable.

Using winget tool

Install winget tool if you don't already have it, then type this command in command prompt or Powershell.

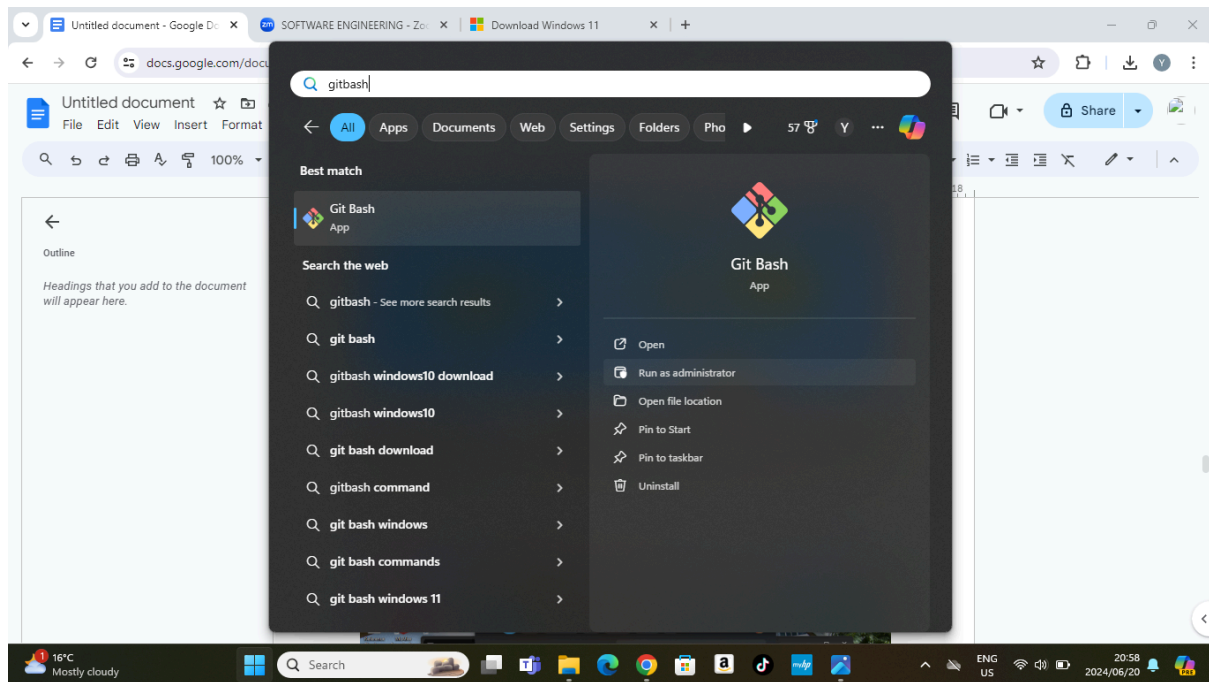
```
winget install --id Git.Git --e --source winget
```

The current source code release is version 2.45.2. If you want the newer version, you can build it from the source code.

Now What?

On the web browser type “git” and press enter. The official link will appear with the url <http://git-scm.com>. Click on it, after clicking the latest version 2.36.1 of git will show, click on it too. It will take you to the “Download for windows” page, scroll down on the windows option and select 64 bit Git windows setup.

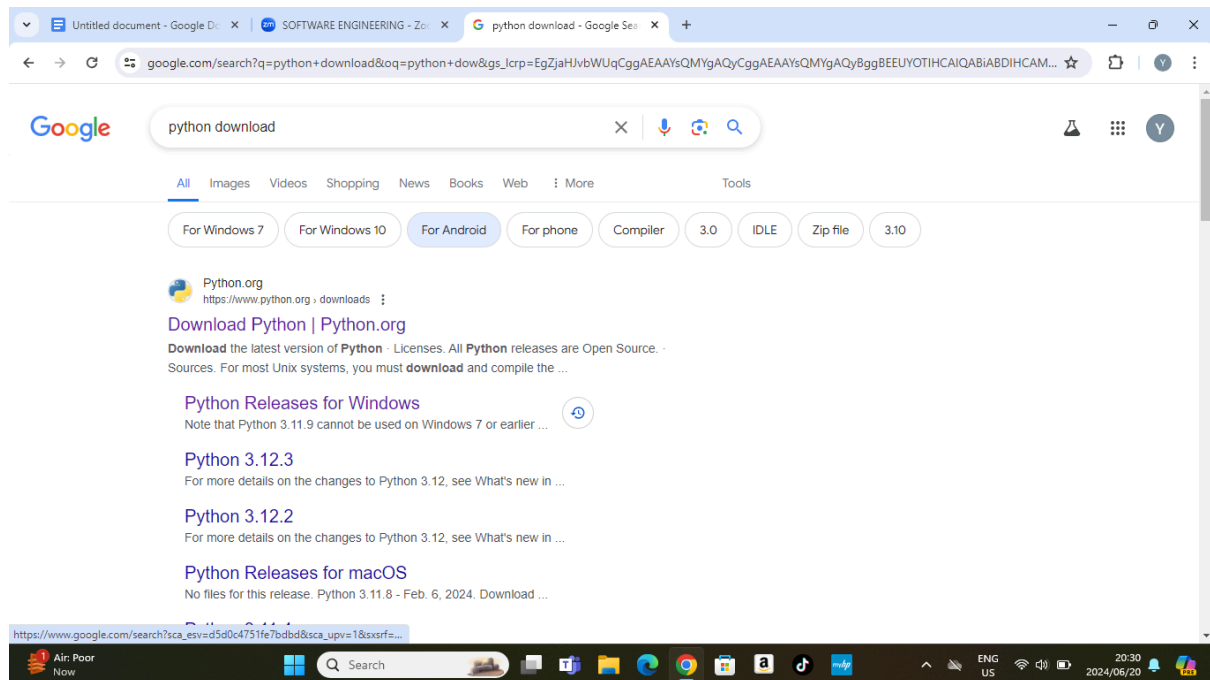
Once the download is done, go to the git file on your local machine. New downloads are stored in the download folder in my local machine, open to install git. Select the destination location, I did not make any changes. Click on next until the install page, once done with install click on finish. Search for Command prompt on windows, click on open and type git. Two git files will appear once install is finished, one Git and the other Gitbash.



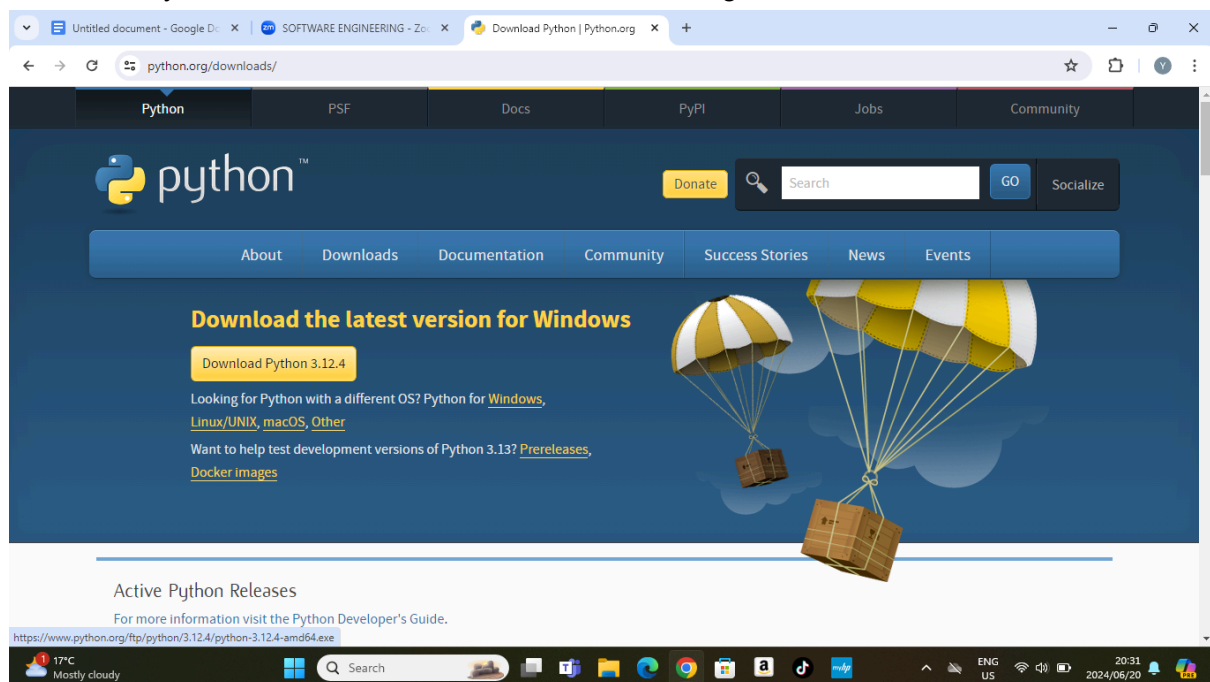
4. Python install

Python is a programming language

On the web browser type python download and press enter. On the search results scroll down and click on the official link python.org.

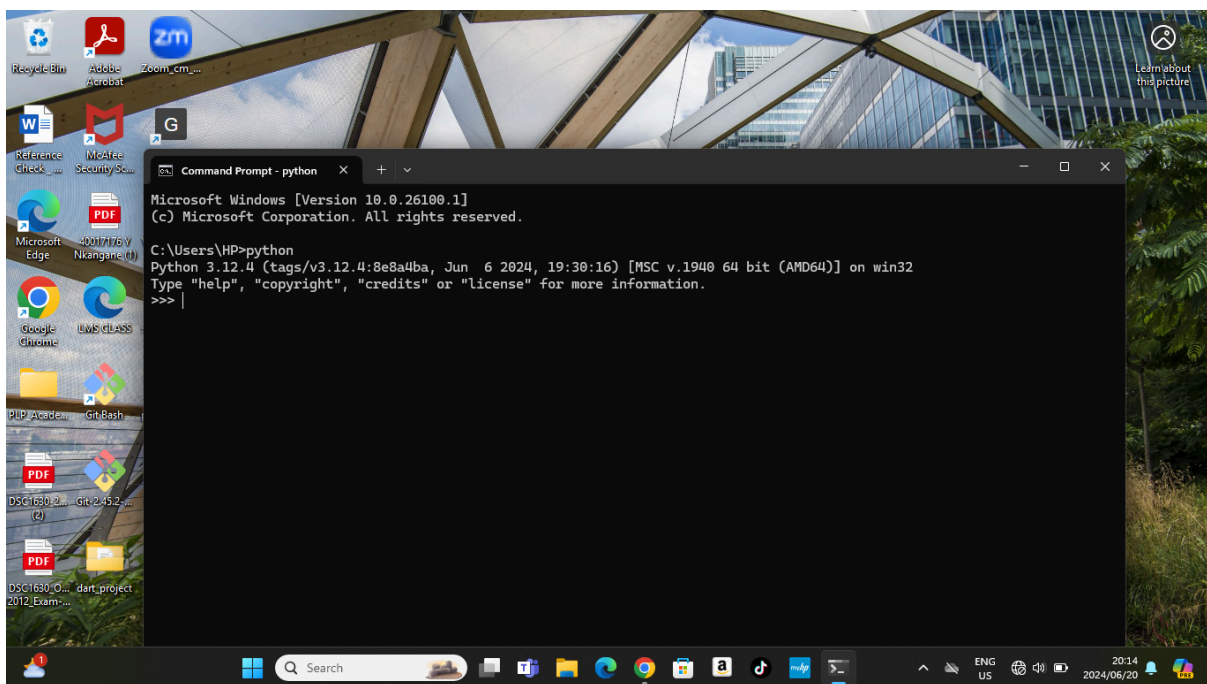
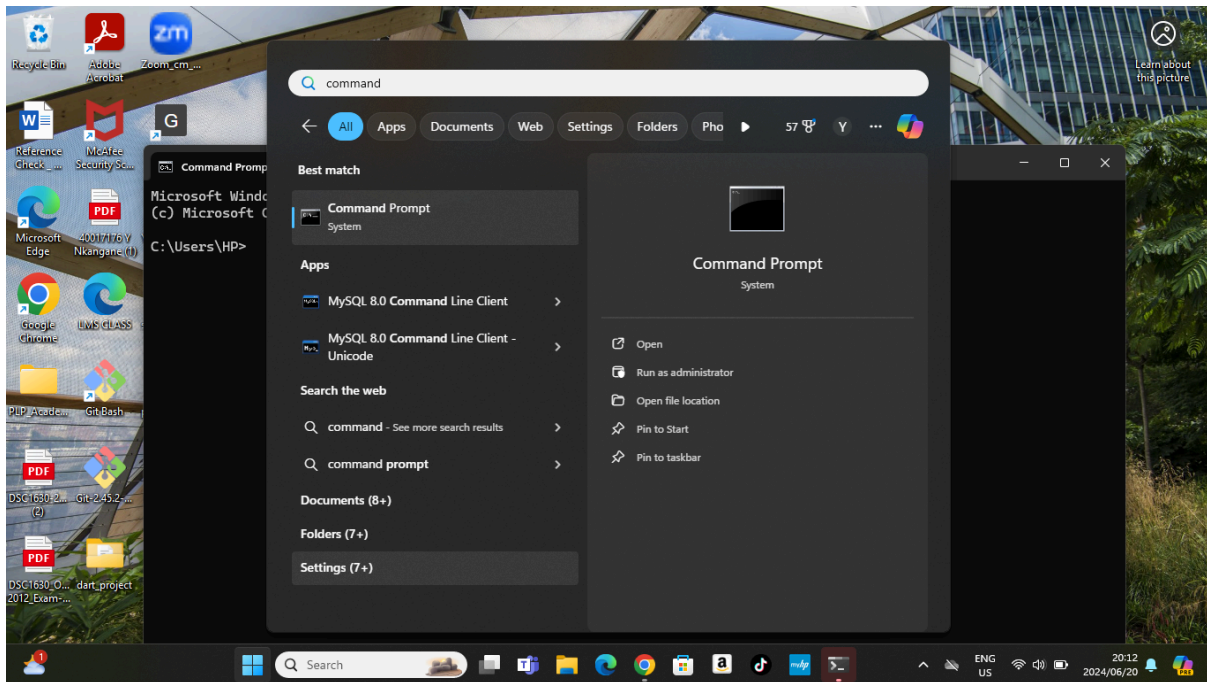


On the python website, there is "Download the latest version for windows' ", click on the Download Python 3.11.4 tab and it will start downloading.



Once the download is complete, the python setup page will open. Before clicking on install tick "add python to path" then proceed to click install. Customise installation on the optional feature, everything is preselected, keep on default and click next and the bottom. Advance option, select the first five on the list, then click on install. Once the setup is successful, close. Press the windows button on the local machine and type command

prompt. Click on open and type python. Download successful.

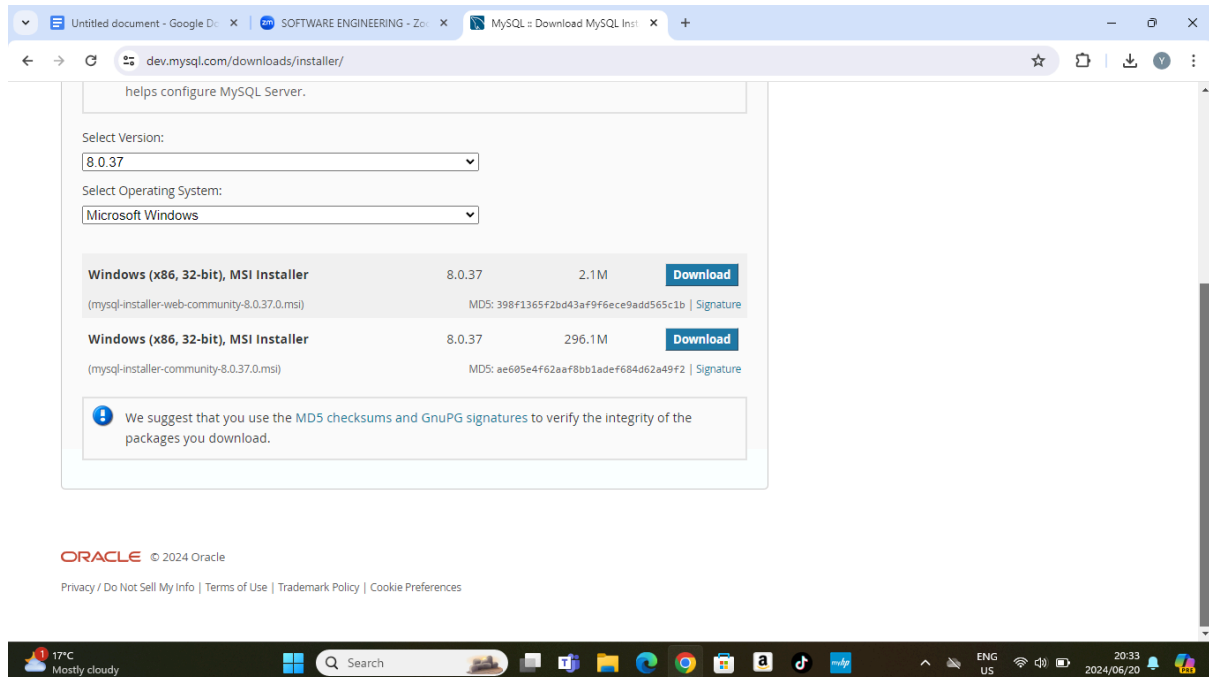


5. MySQL: Download and install MySQL Database

My Structured Query Languages also known as MySQL is a widely used relational database management system. It powers many of the world's most accessed applications, including X, Facebook, Netflix.

MySQL for windows install

Type my SQL download on the web browser and press enter, click on the official link and it will redirect you to the official site of MySQL. Scroll down to MySQL Community gpl download, open it and it redirect you to MySQL Community Download.



Click on MySQL Installer for Windows, it will again redirect you to MySQL Community Download, scroll and click on the second option MySQL community installer version with 292MB. It will open another page with Oracle at the bottom, click on "no thanks, start my download" and it will start downloading. Once done downloading, open it in the folder that is saved in it, open it to start launching.

On the setup page click on customise then click next, under select products expand until you get MySQL server 8.2.5 then click on the top arrow. Something should appear on products to install.

Then expand on the application on the first table, it will show MySQL workbench, then GY interface then click on the top arrow on products to be installed. Click on next. Products to be installed will appear on the next page, click install and wait till they have 2 green ticks then click on next, click next again. Keep it default then click on next

6. Explore Extension and Plugin on VS code

Install extension on my VScode include:

1. Prettier for code formatting.
2. Python
3. Dart
4. Colour brackets for colouring keywords syntax highlighting
5. Linter Extension.

Challenges faces with the downloads and install: MySQL was a large file, it took me days to to complete the download, i had to download five times until it was successful. Another challenge was poor internet connection and a slow performing laptot