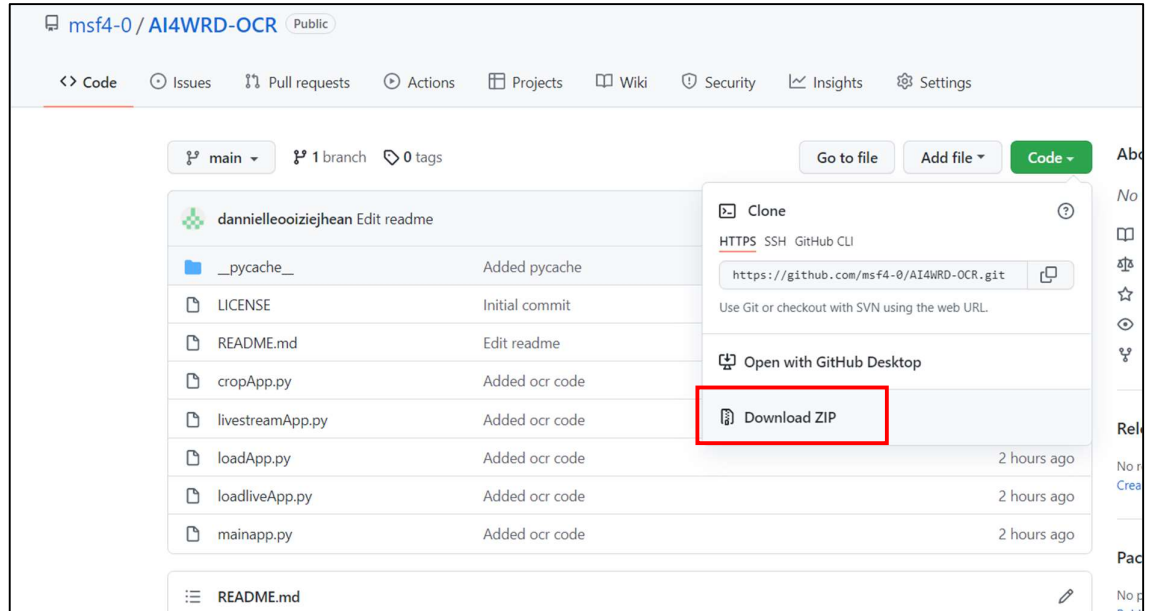


AI4WRD-OCR Installation Guide

Prepared by: Dannielle Ooi Zie Jhean

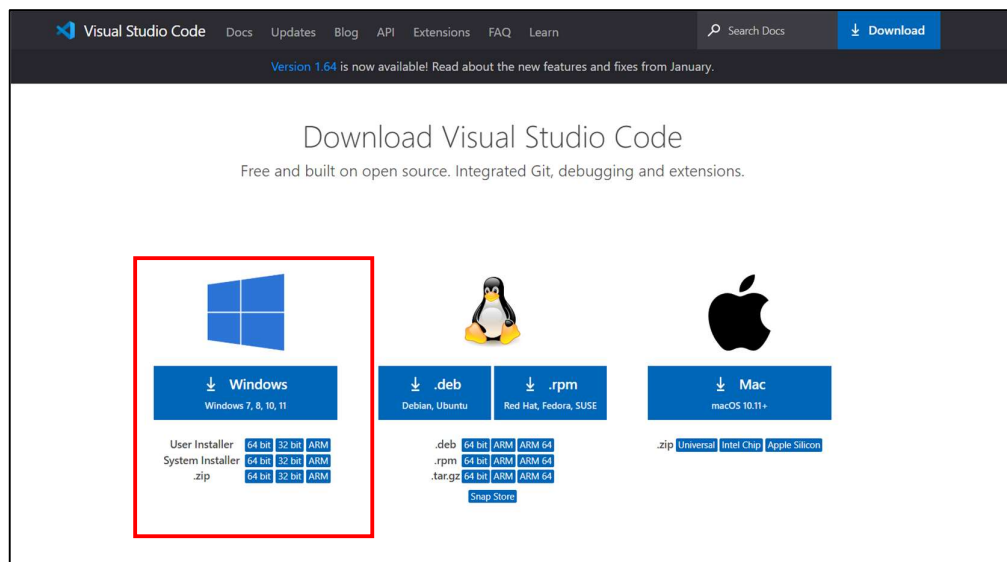
1. Download the zip file under the AI4WRD-OCR repo in Github.

<https://github.com/msf4-0/AI4WRD-OCR>

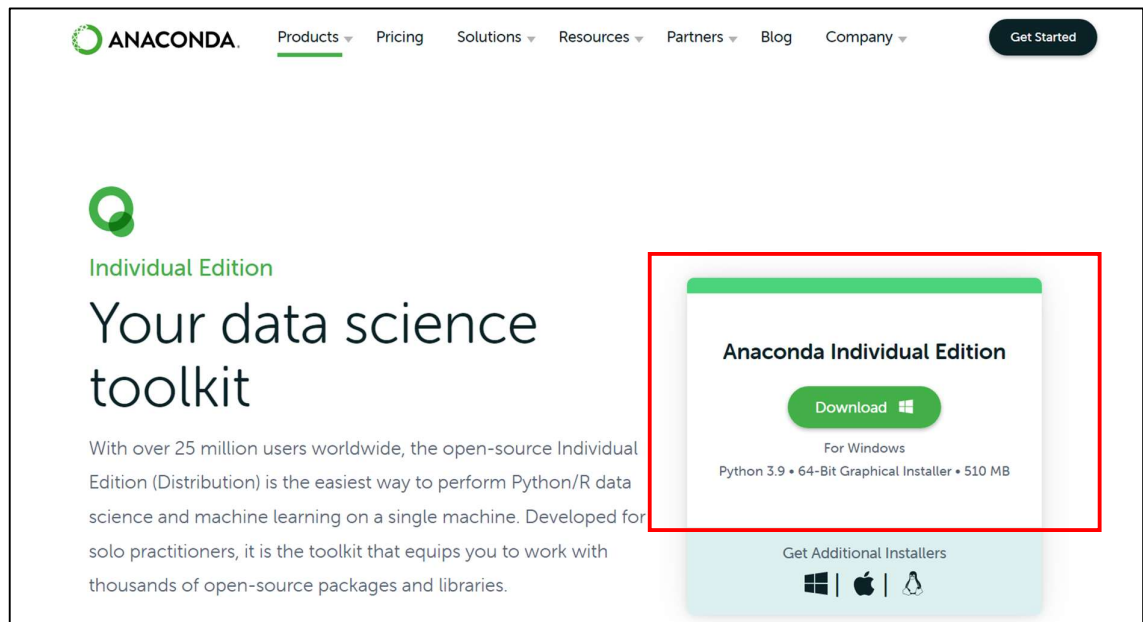


2. Download Visual Studio Code for Windows and go through the installation.

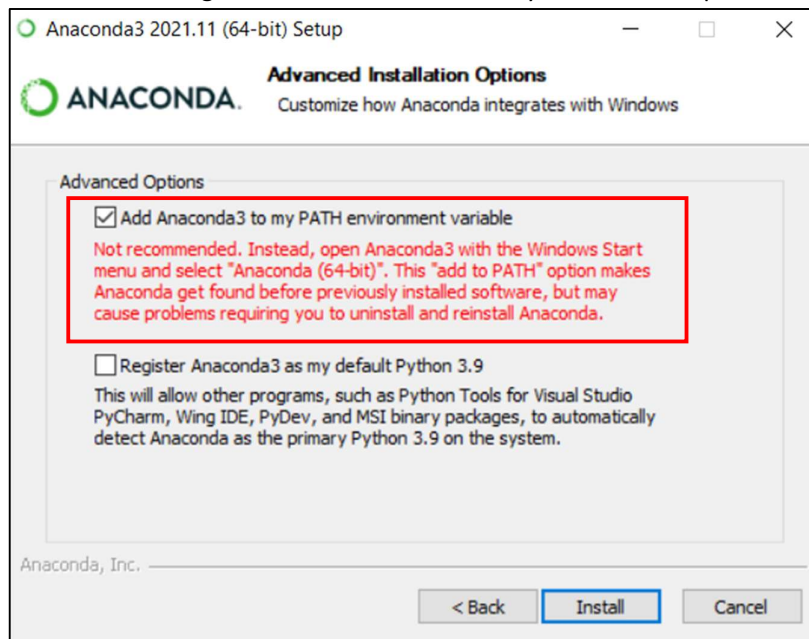
<https://code.visualstudio.com/download>



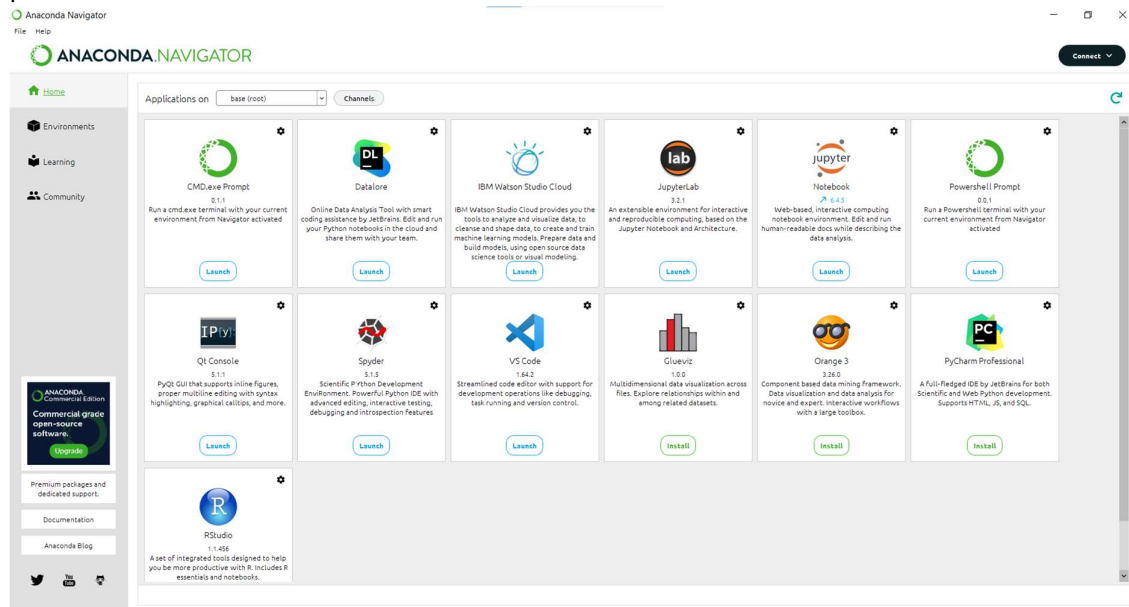
3. Download Anaconda for Windows. This is where you will create your virtual environments.
<https://www.anaconda.com/products/individual#windows>



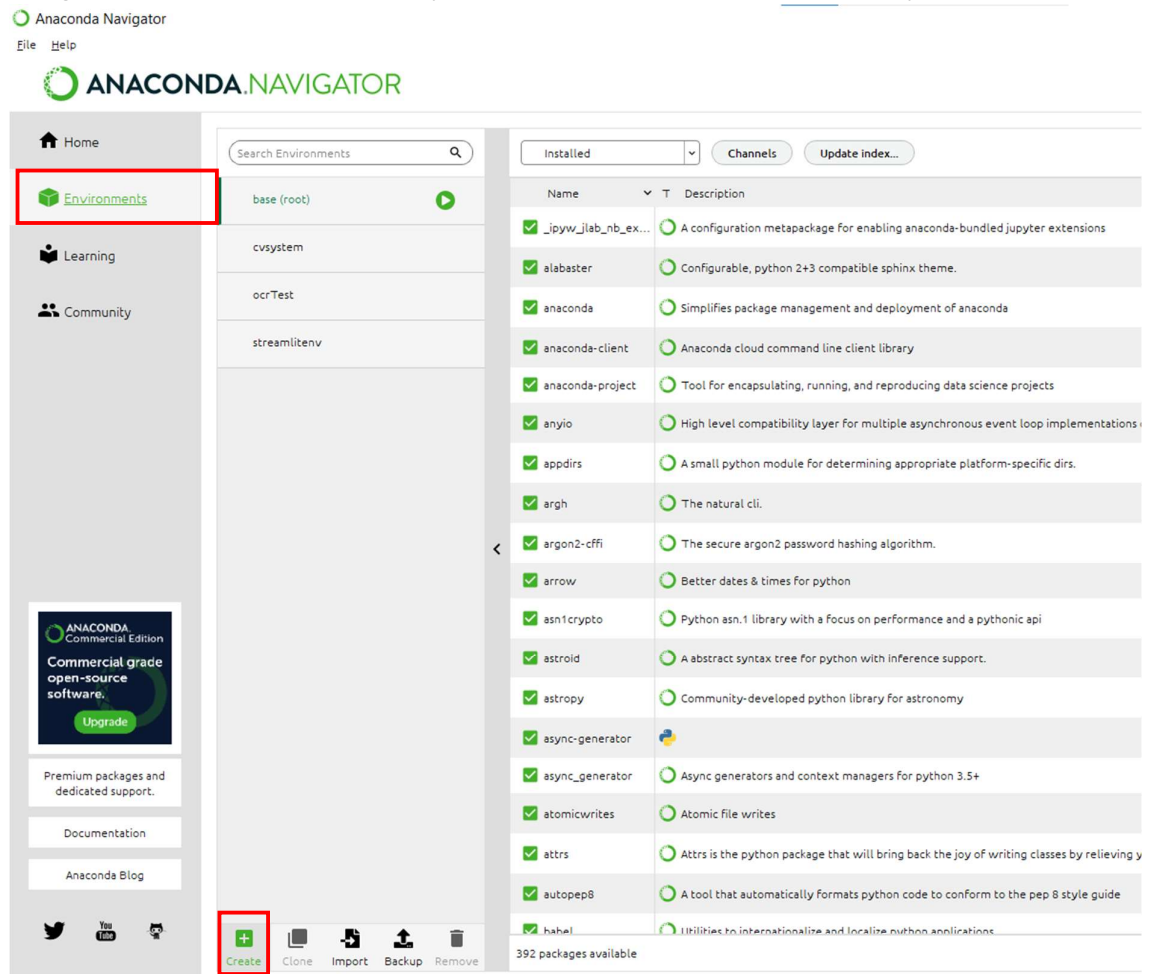
4. Ensure that during the Anaconda installation , you select the option shown below.



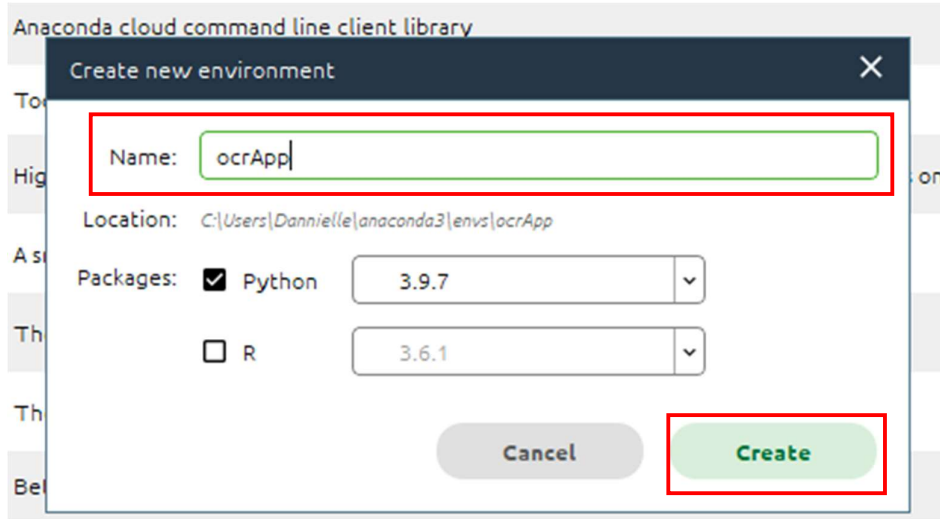
5. After installation, Start Anaconda by searching “Anaconda Navigator” in the Windows search panel. You should be able to see the interface below.



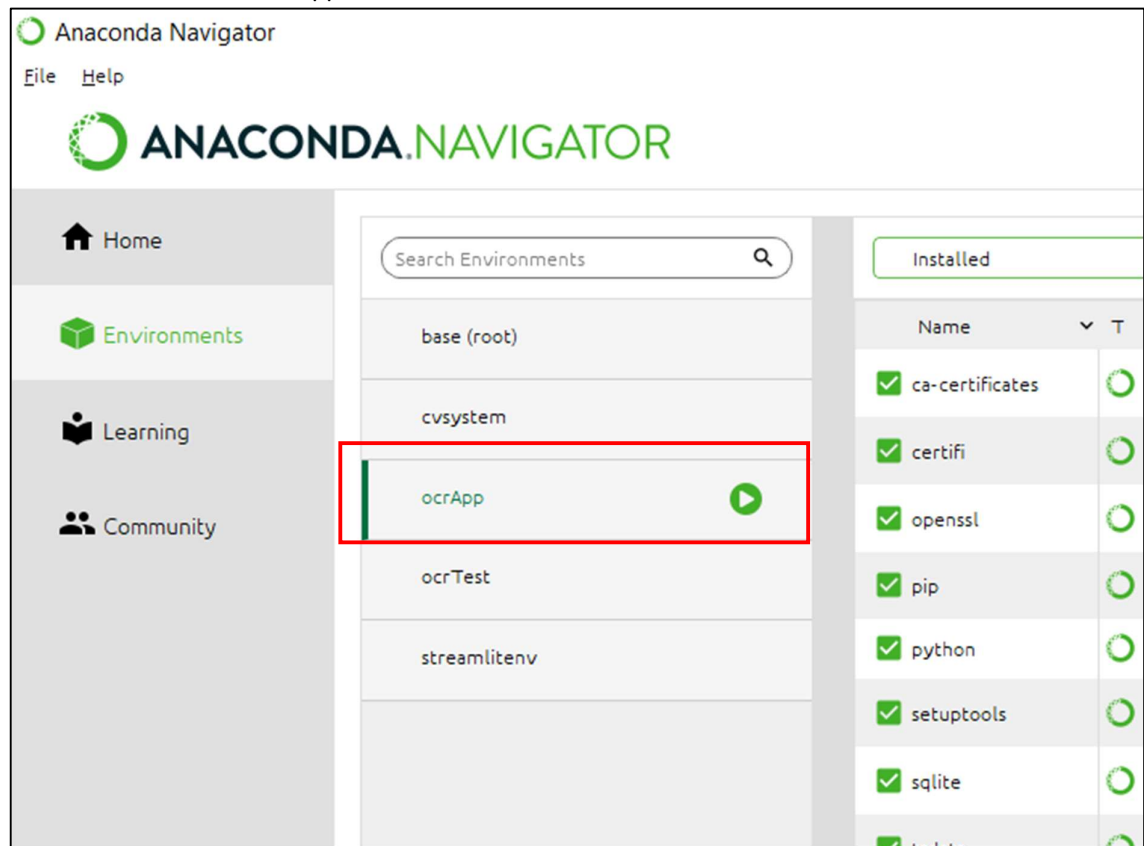
6. Navigate to Environments at the side panel and select Create at the bottom left panel.



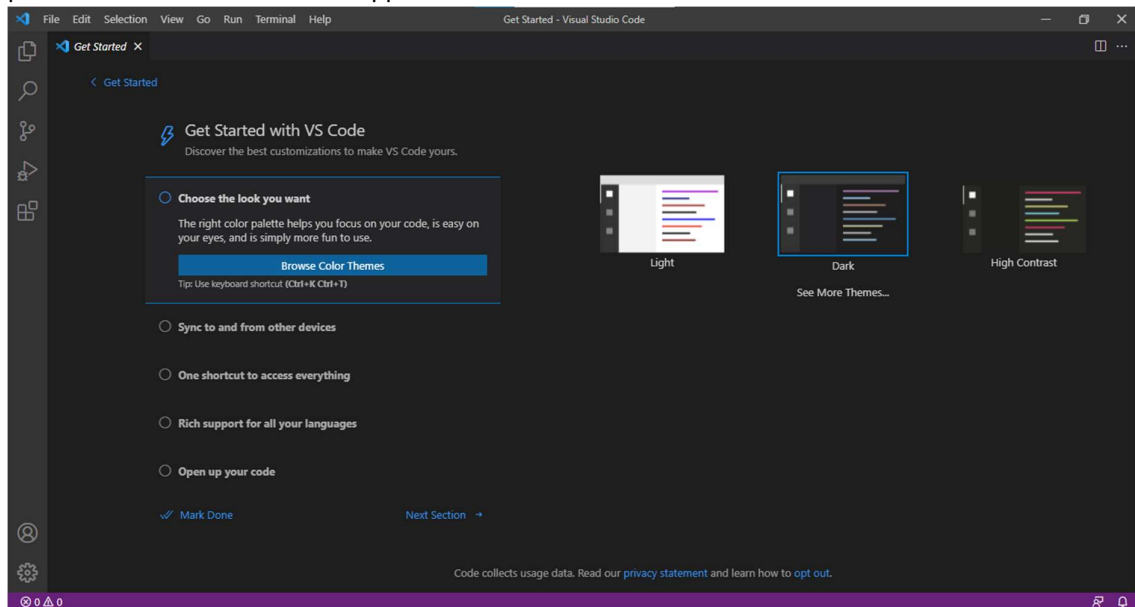
7. Enter the name of your new virtual environment and click Create in the pop-up window shown below.



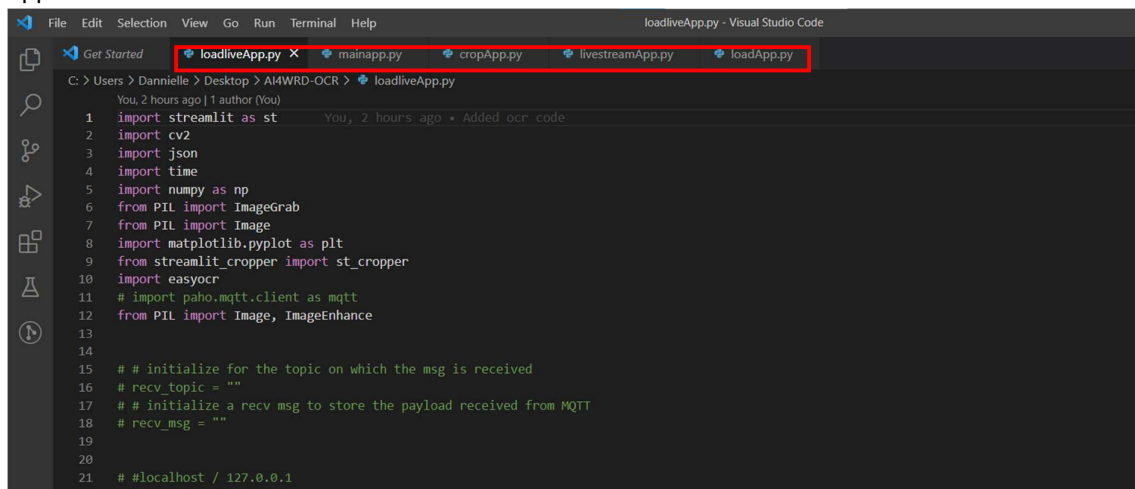
8. Your environment should appear under the environment tab as shown below.



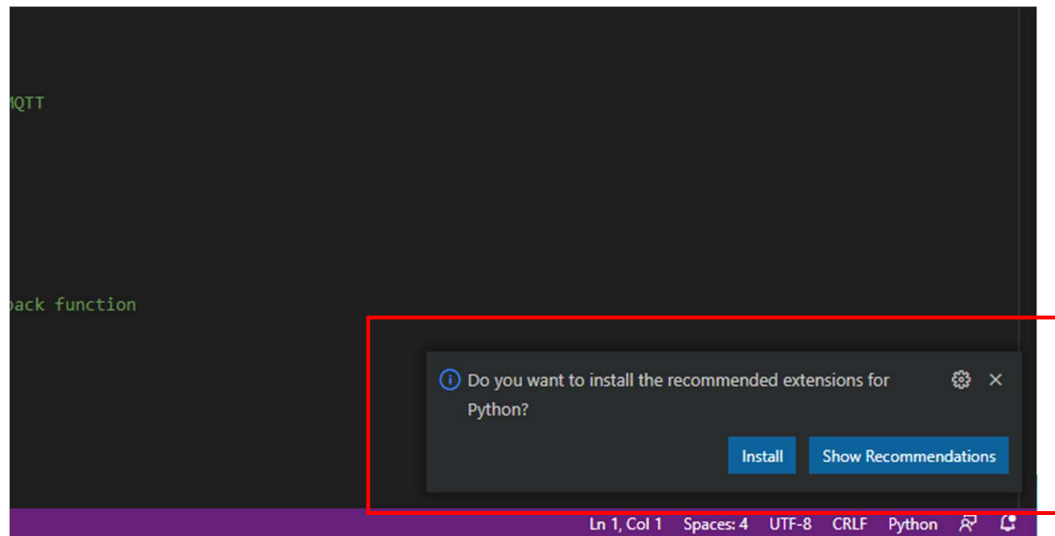
9. Next, start Visual Studio Code by searching “Visual Studio Code” in the Windows search panel. The interface below will appear.



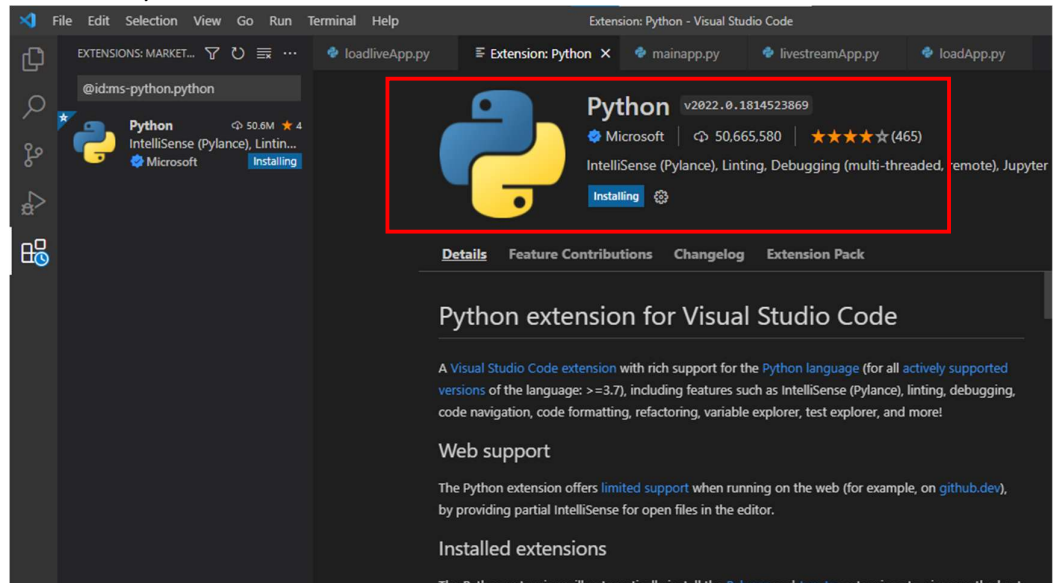
10. Drag in/open the python files from the zipped folder in Visual Studio Code. Your files should appear in Visual Studio Code.



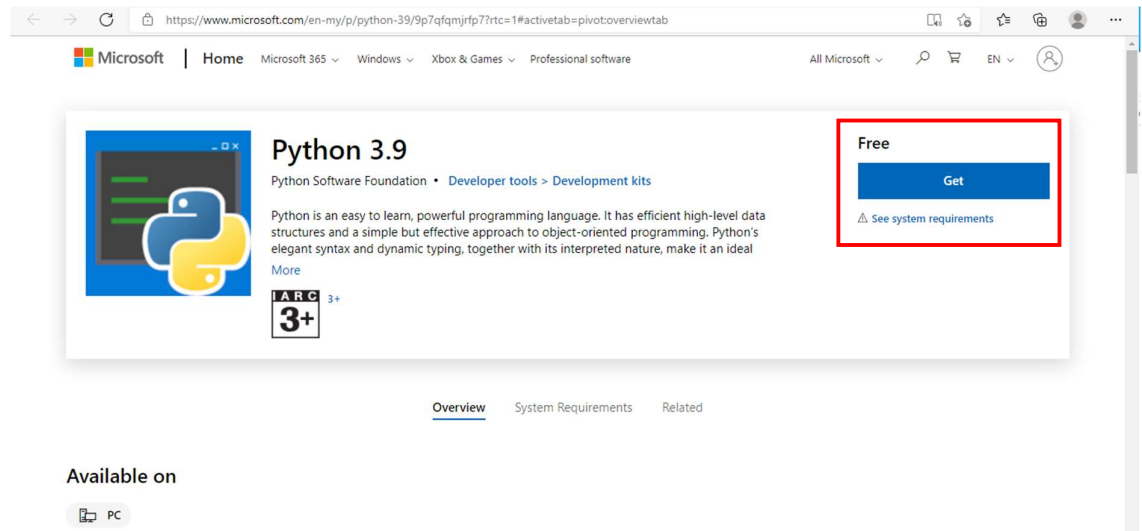
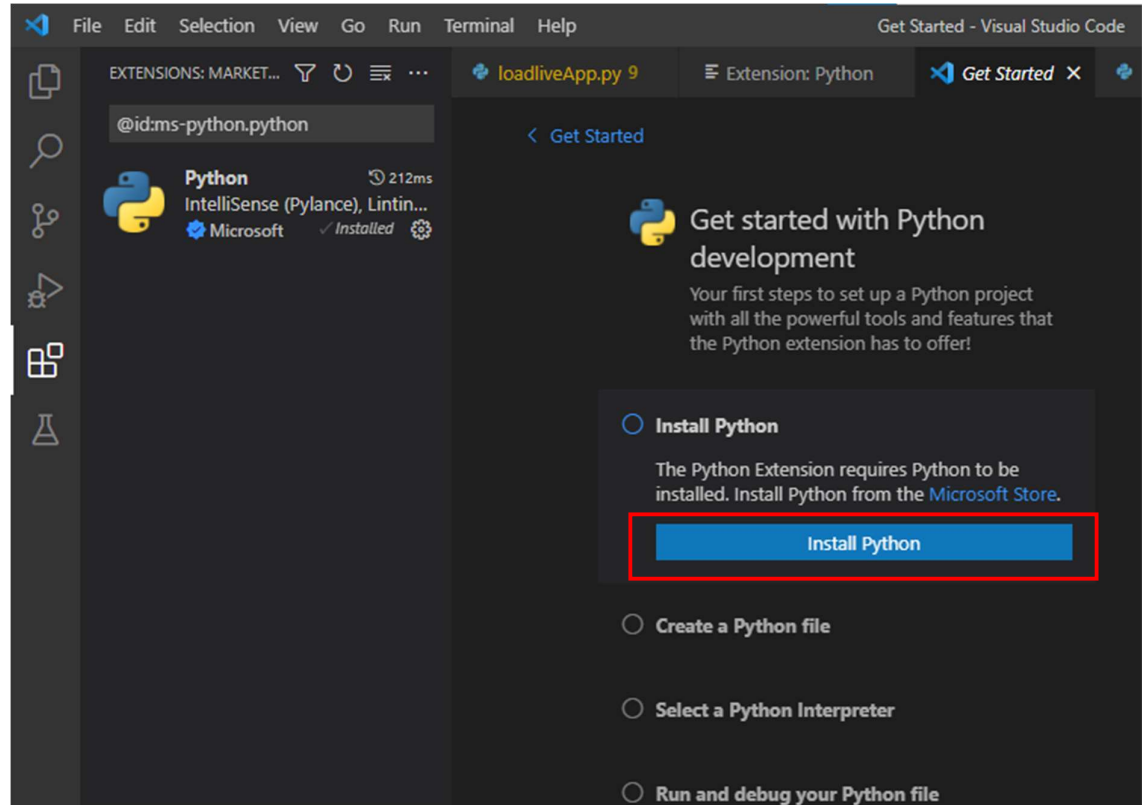
11. A pop up will appear at the bottom right and ask you to install the required Python extensions. Select install and follow the instructions.

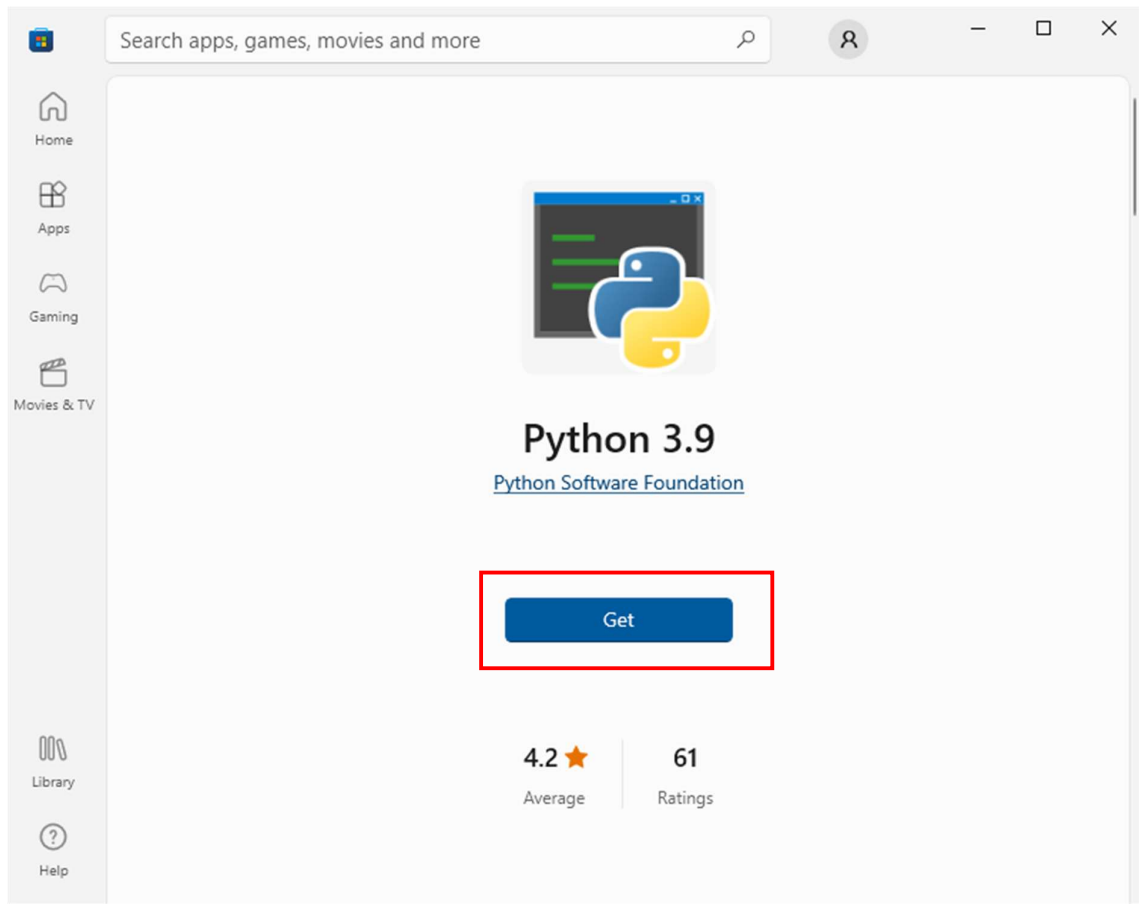


Install the Python extension

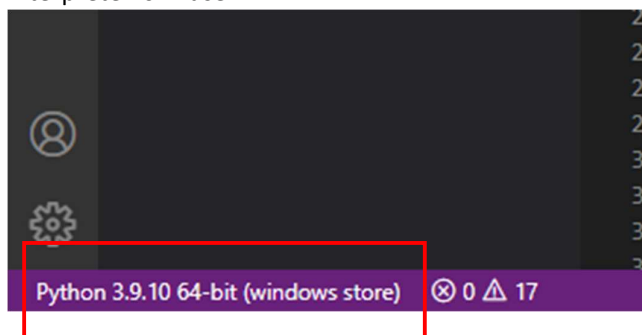


Install Python as shown below

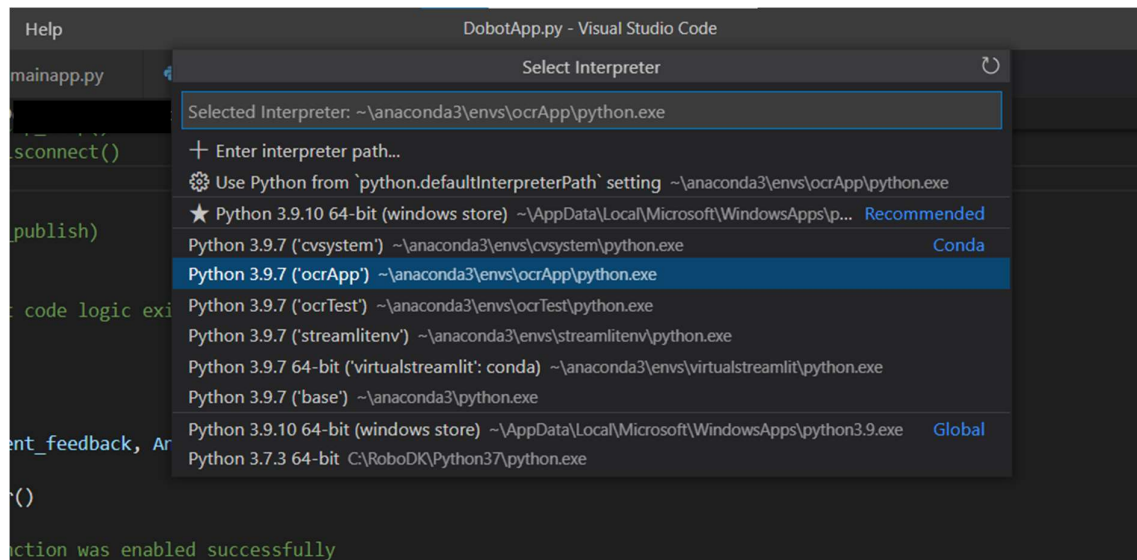




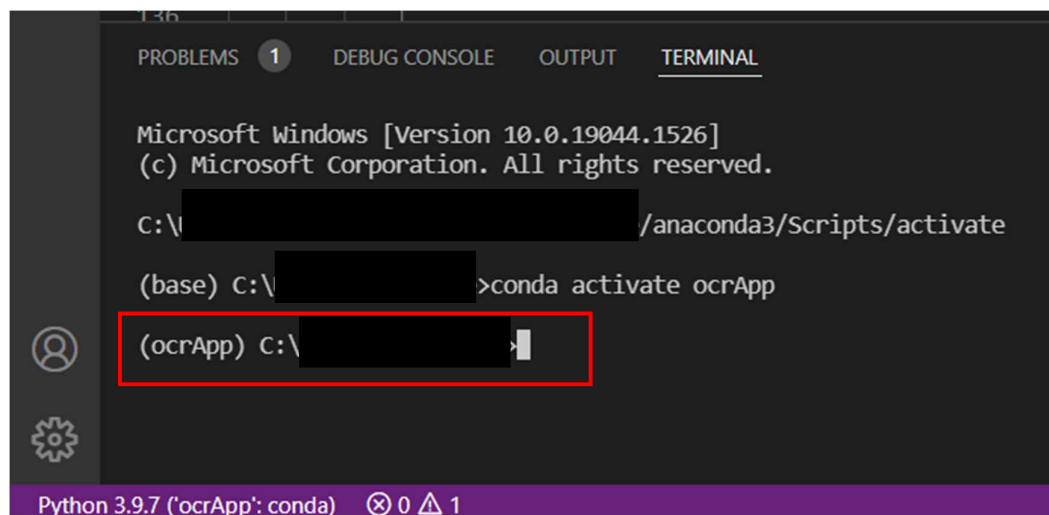
12. Next, we will change the python interpreter to our Conda environment python interpreter. If you look at the bottom bar of Visual Studio code, you will be able to see which Python interpreter is in use.



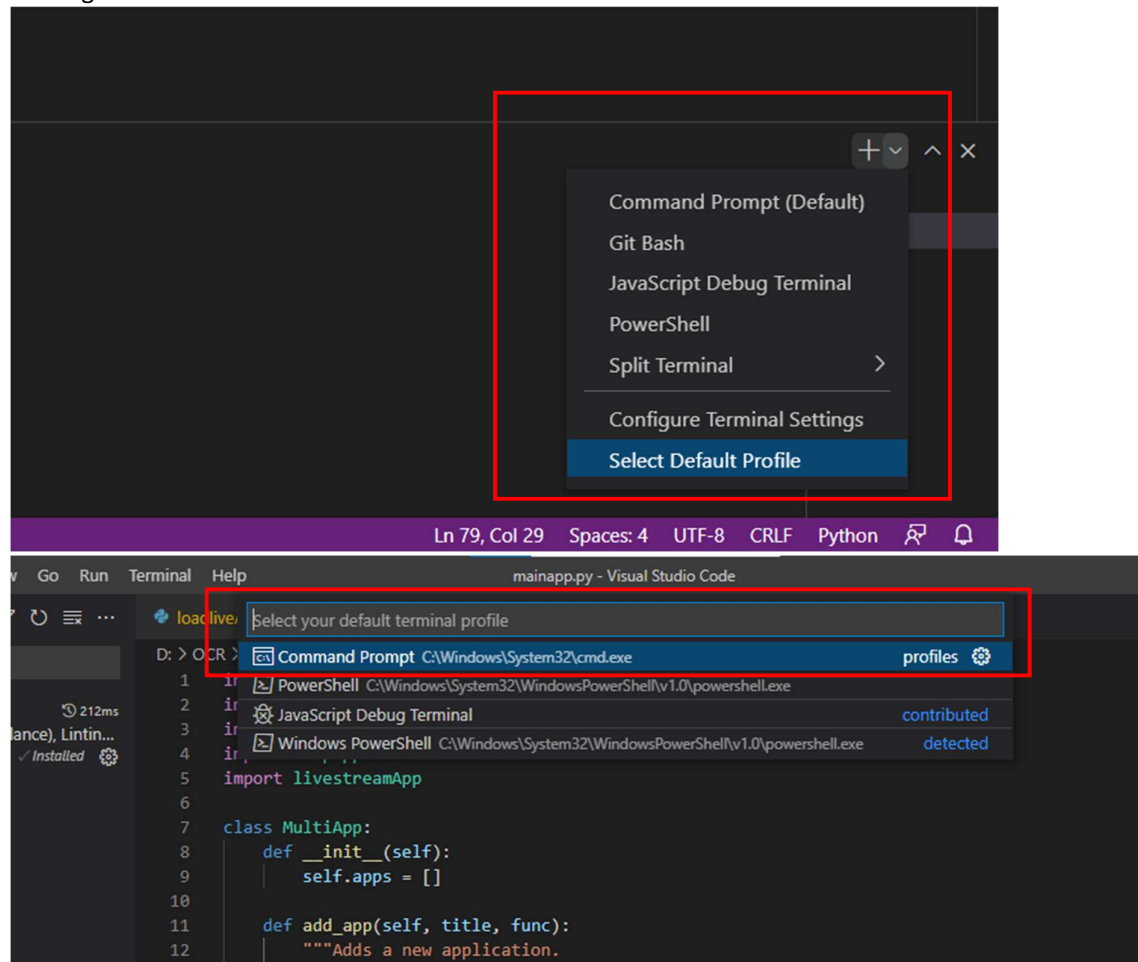
13. Select the Conda environment Python interpreter by clicking on the interpreter at the bottom left of the purple bar. A drop down should appear as shown below. Select the “ocrApp” interpreter. (or whichever name you have created for your virtual environment)



14. Navigate to your toolbar then Terminal>create new terminal. You will see that you are in your virtual environment.



15. Set your default terminal as command prompt as shown below. This will allow your python codes to run in the command prompt. Running the program in pythonshell may cause error messages.



16. Lastly, we will install all the required extensions in the virtual environment. Go to your terminal, check that you are in your virtual environment. Copy and paste the below in the terminal:

```
pip3 install torch==1.10.2+cu113 torchvision==0.11.3+cu113 torchaudio==0.10.2+cu113 -f https://download.pytorch.org/whl/cu113/torch\_stable.html
```

Then we will install the extensions from requirements.txt from the extracted zipped folder, so ensure that your directory is in the directory of the extracted zipped folder.

Copy and paste the below in the terminal:

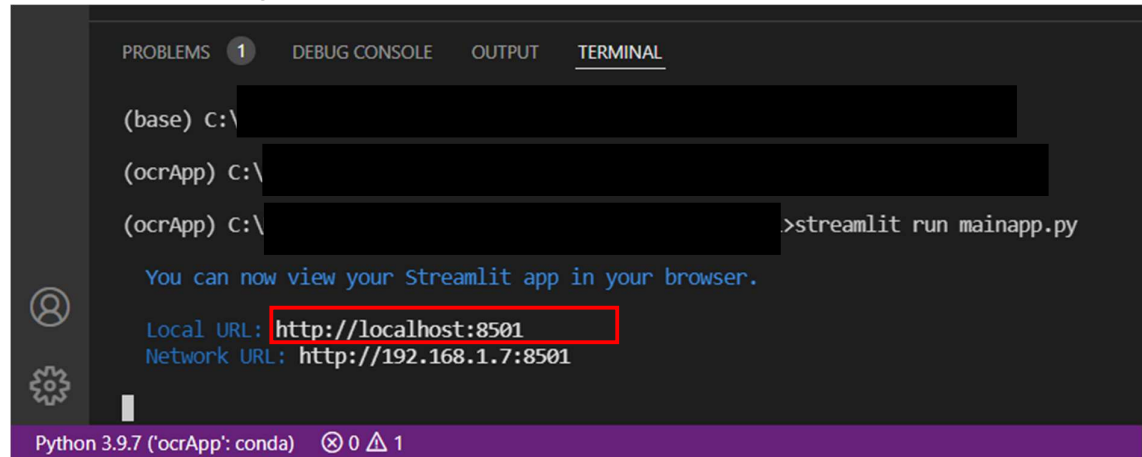
```
pip install -r requirements.txt
```

17. To start the AI4WRD-OCR Application. Type the following into the terminal. Ensure that you are in the virtual environment and correct directory.

Copy and paste the following in the terminal:

```
streamlit run mainapp.py
```

The AI4WRD-OCR App should pop up in your browser. If it does not appear on your browser, Ctrl+Click the following.



The screenshot shows a VS Code terminal window with the 'TERMINAL' tab selected. The terminal output shows the command 'streamlit run mainapp.py' being executed in a conda environment. Below the command, a message states 'You can now view your Streamlit app in your browser.' followed by the 'Local URL: http://localhost:8501' and 'Network URL: http://192.168.1.7:8501'. The 'Local URL' is highlighted with a red rectangle. The status bar at the bottom indicates 'Python 3.9.7 (\"ocrApp\": conda)' and shows 0 errors and 1 warning.

```
PROBLEMS 1 DEBUG CONSOLE OUTPUT TERMINAL
(base) C:\[redacted]
(ocrApp) C:\[redacted]
(ocrApp) C:\[redacted] >streamlit run mainapp.py

You can now view your Streamlit app in your browser.

Local URL: http://localhost:8501
Network URL: http://192.168.1.7:8501

Python 3.9.7 (\"ocrApp\": conda) 0 1
```

To STOP the program type in the terminal:

```
Ctrl+C
```