Install Python:

https://www.python.org/downloads/

I would suggest not to install the latest version as it might have some bugs. You want to have the similar setup as I have, install Python 3.10.
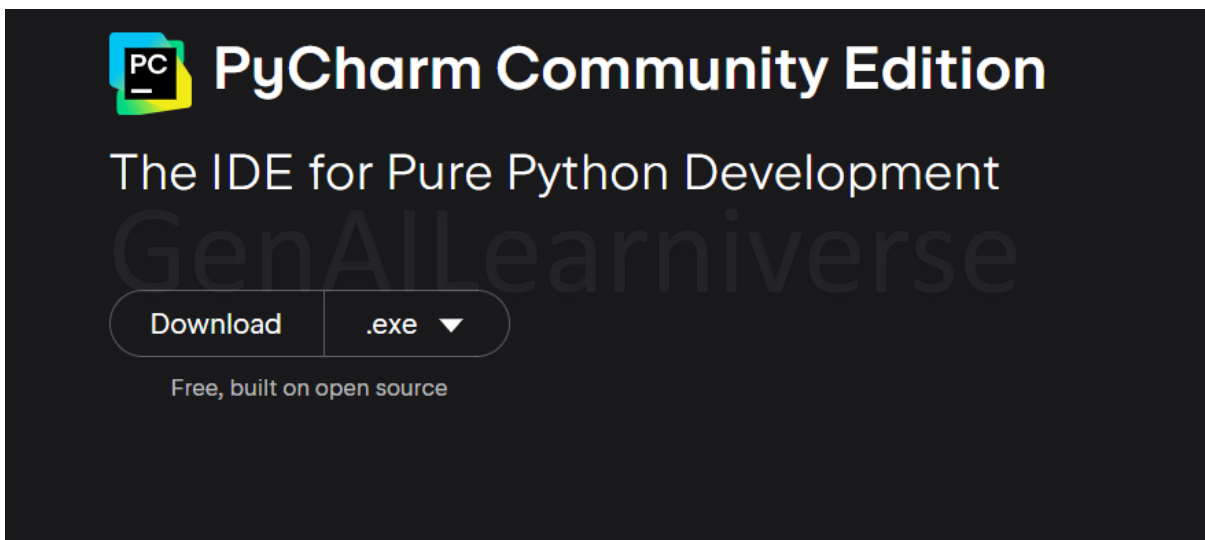
Install Pycharm (IDE)

https://www.jetbrains.com/pycharm/download/?section=windows

Scroll down the page and download the communicate edition, which is free and will suffice the need for our ptoject:

Visual Studio (to install C++ compiler):

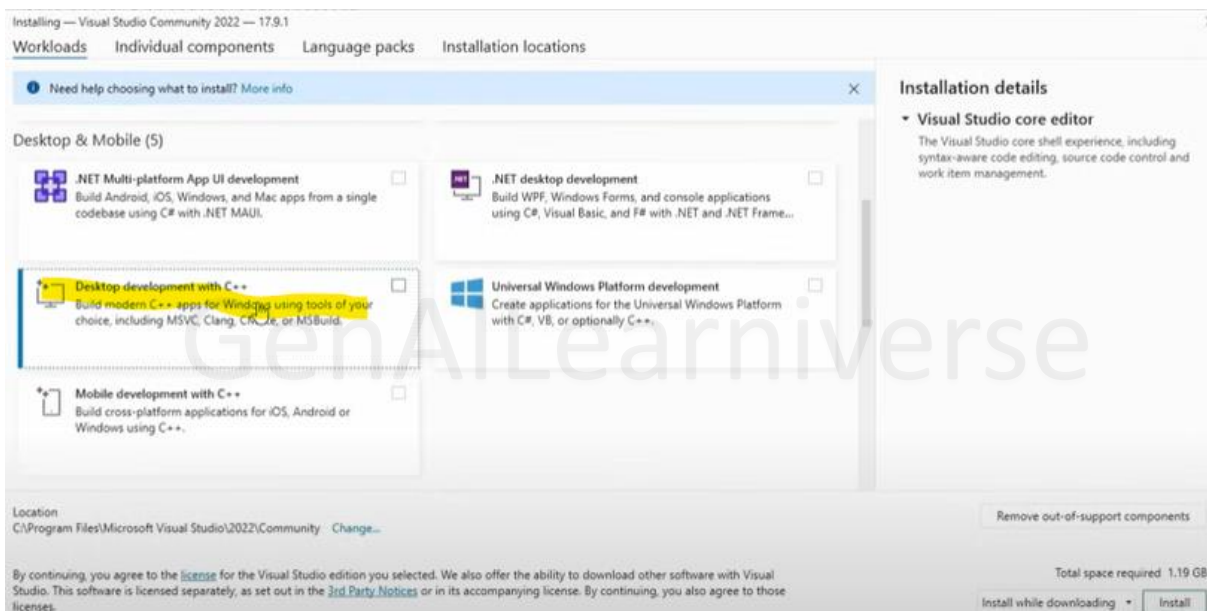**https://visualstudio.microsoft.com/**

Download the community edition: Free and suffice our project needs:
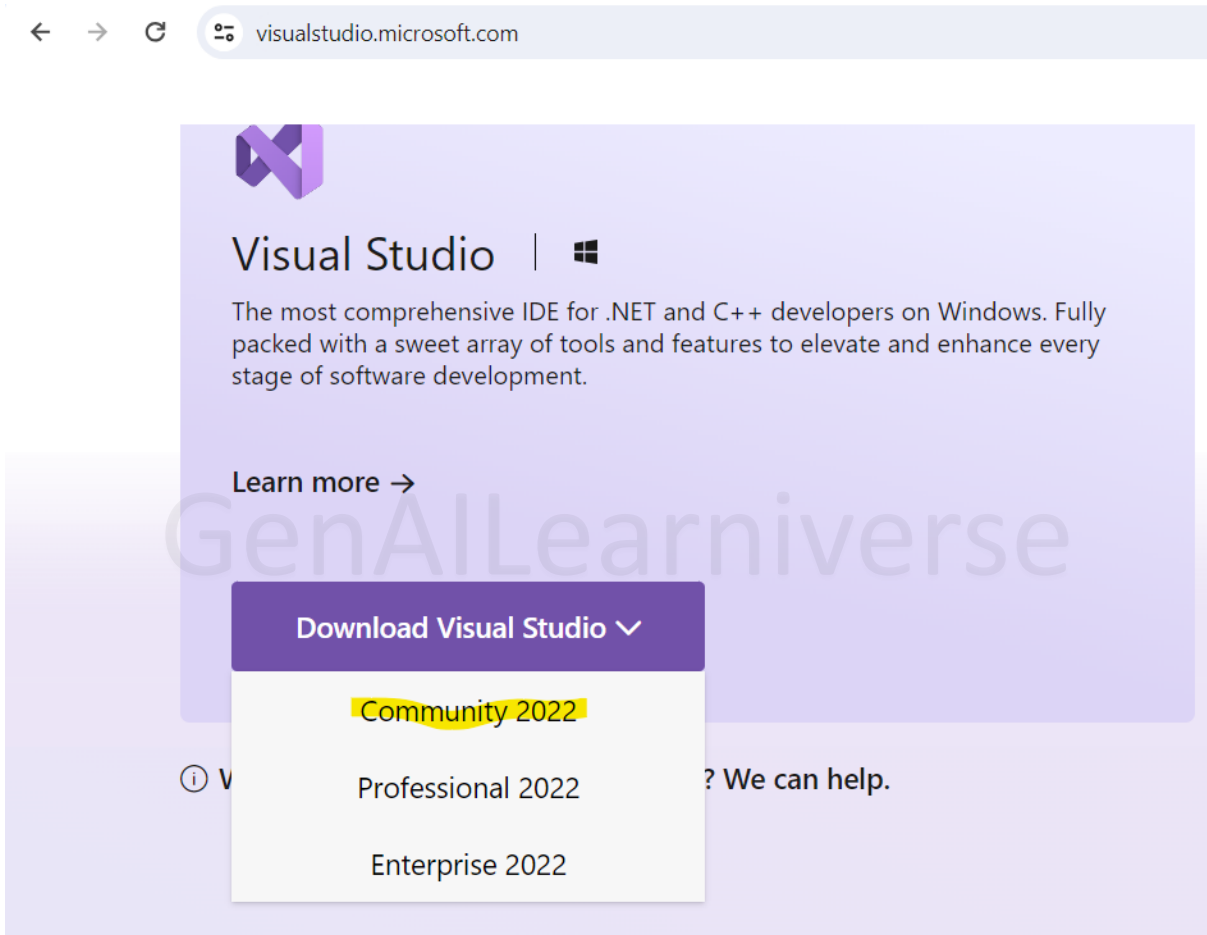
Once you run the exe, in the below screen, make sure to select the highlight section as shown below and click install:

Install FFmpeg:

https://ffmpeg.org/download.html

Click on windows (or any other OS you use) and click the highlighted link below.

 Then download the file as highlighted below.

Once the file is downloaded, extract the file at the location you want, go to bin folder, copy the link til bin folder and add it to the environment variable

Search → Type Environment variable

For GPUs

Nvidia driver:

https://www.nvidia.com/en-gb/geforce/drivers/
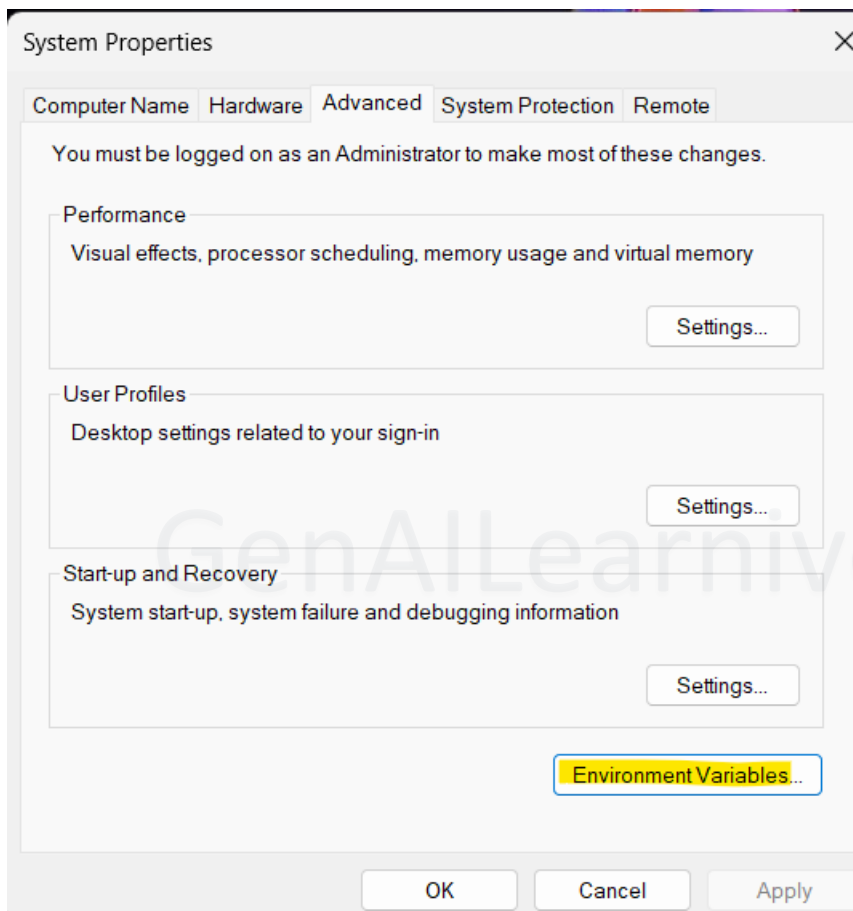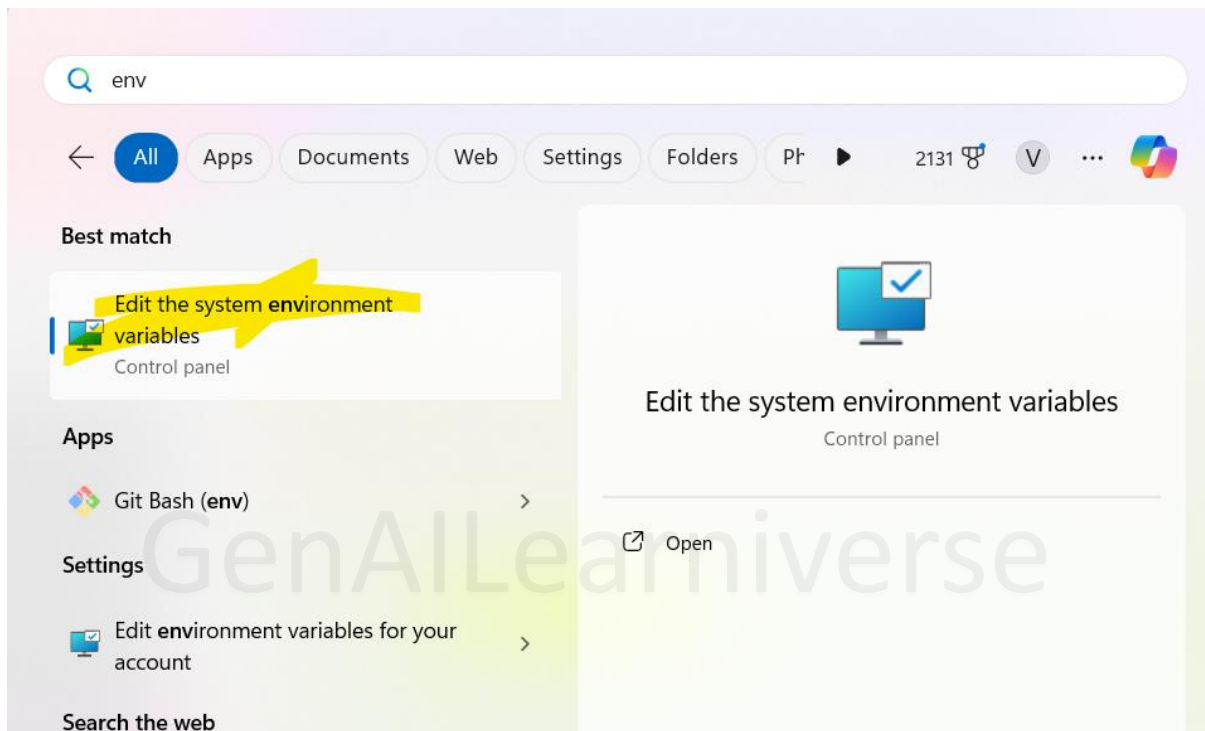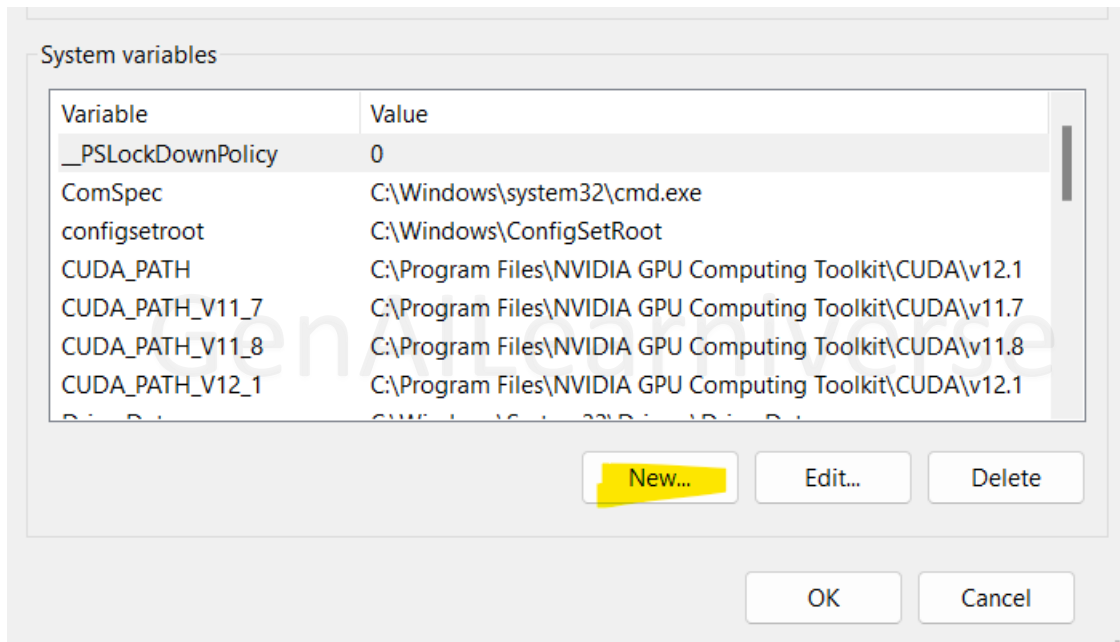
Select the details as per your configurations and click on download:

Cuda:

https://developer.nvidia.com/cuda-11-8-0-download-archive
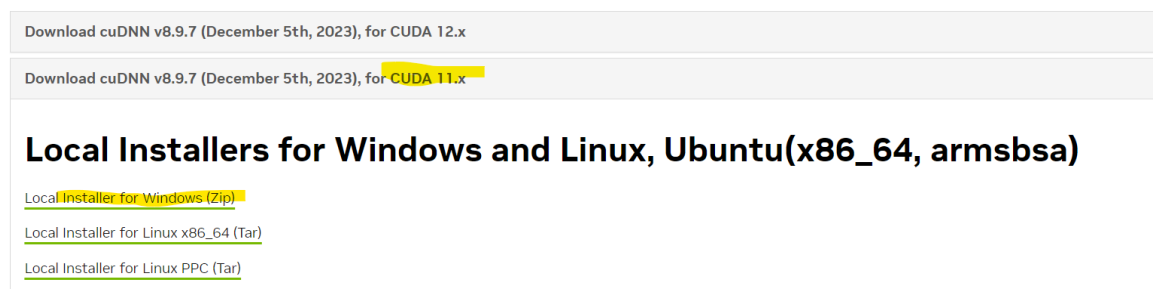
I would suggest to download 11.8 version but if you want you can also download the different version but don't download the latest one as many software might not be compatible with the latest CUDA version.

Cuda deep Neural Network:

https://developer.nvidia.com/rdp/cudnn-archive

NVIDIA cuDNN is a GPU-accelerated library of primitives for deep neural networks.

Download cuDNN v8.9.7 (December 5th, 2023), for CUDA 12.x

Download cuDNN v8.9.7 (December 5th, 2023), for CUDA 11.x

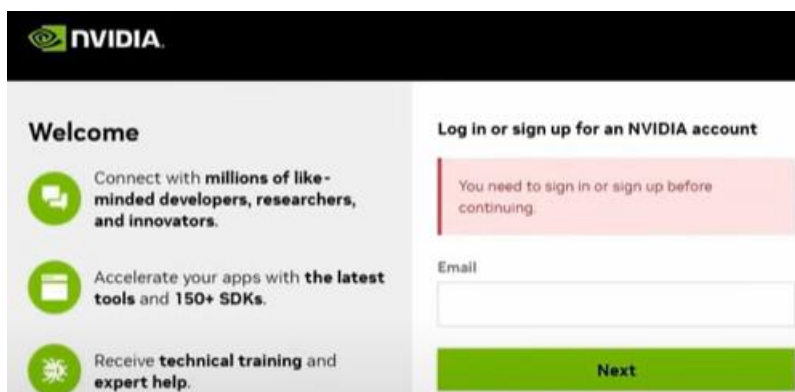## Local Installers for Windows and Linux, Ubuntu(x86_64, armsbsa)

Local Installer for Windows (Zip)

Local Installer for Linux x86_64 (Tar)

Local Installer for Linux PPC (Tar)

If you have downloaded different cuda version for e.g., Cuda 12.x, select cuDNN version accordingly.

Remember, it would require you to signing in first before downloading cuDNN

Now extract this file and to the location where you have installed CUDA. Default location is :

C:\Program Files\NVIDIA GPU Computing Toolkit\CUDA\v11.8 (you might have different version If you installed different CUDA version). Now from the extracted file copy bin, include and lib folder and paste it in the location where you installed CUDA, in my case C:\Program Files\NVIDIA GPU Computing Toolkit\CUDA\v11.8. If it ask for the confirmation to replace the file in destination folder, click yes.