In order to create a virtual environment, we need to use virtualenv tool to set up our python environments. It’s been used since python 3.3, where you can install venv by running this command in your cmd:

pip install virtualenv

To use venv in your project, create a new project folder in your terminal, cd there, and then run the command shown below:

mkdir projectA

cd projectA

python3.10 -m venv env

You must activate the virtual environment after you have created it in order to use it for your project. Run the code below to activate your virtual environment:

env/Scripts/activate.bat //In CMD

How can we verify that our project is in fact isolated from our host Python after activating our virtual environment? Several options are available to us. Moreover, by running the code below in the active virtual environment, we can first examine the list of packages installed in our virtual environment. There are only two packages that you will see: pip and setuptools, which are the default base packages for a new virtual environment.

pip list

You'll see that your host Python has a lot more libraries than you may have previously installed. Until you install these libraries, they are not a part of your Python virtual environment.