



## Installation Commands

For all commands, make sure capital letters match.

In these images, the text to the right of the > icon is the command you should enter (first word usually coloured orange). Any output will appear on the line below this.

Once Python and VS Code are installed, in a terminal within VS Code type:

```
python --version
```

Like this:

```
PS E:\Documents\AI> python --version  
Python 3.13.5
```

Use python3 if python alone does not work (here and anywhere else you need to use the python command), e.g.:

```
python3 --version
```

Like this:

```
E:\Documents\AI> python3 --version
```

Check that the result is

```
Python 3.13.5
```

If not, install this version of Python (3.15.5) from the Python website.

Next, for creating the virtual environment:

```
python -m venv venv
```

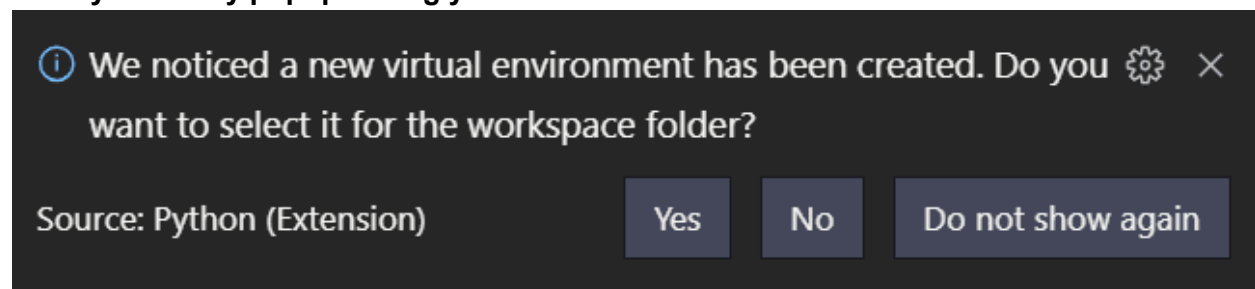
```
E:\Documents\AI> python -m venv venv
```

Again, use python3 if python alone does not work:

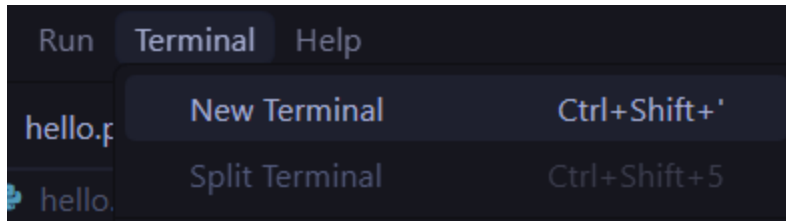
```
python3 -m venv venv
```

```
E:\Documents\AI> python3 -m venv venv
```

Click yes on any popup asking you to select this venv for the folder:



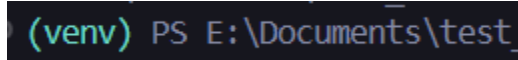
**Next, activate the python environment** (if creating a new terminal does not automatically do this). Create a new terminal using:



(the terminal button will be at the

top, on MacOS in the Apple taskbar).

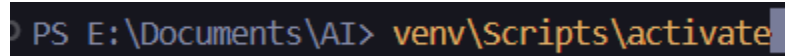
**Look for this to show that the terminal is in an active venv:**



If this does not appear in new terminals:

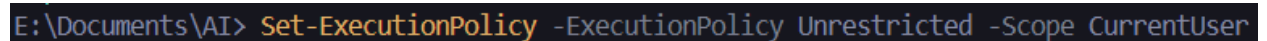
For Windows:

**venv\Scripts\activate**



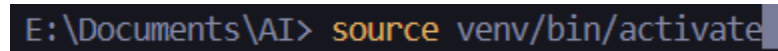
(if the above command does not work, try this and then try again):

**Set-ExecutionPolicy -ExecutionPolicy Unrestricted -Scope CurrentUser**



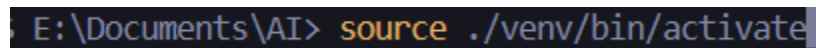
For MacOS:

**source venv/bin/activate**



(if this does not work, try this):

**source ./venv/bin/activate**

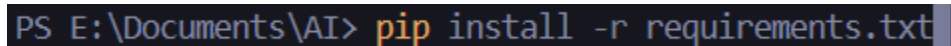


### **Installing packages:**

Make sure you've unzipped/decompress the requirements.zip file (in MacOS, usually you can just open it **then move the contents to your project folder**).

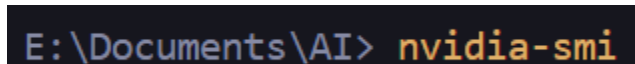
Once you've done that:

**pip install -r requirements.txt**



See the video section on PyTorch for the PyTorch installation command; try:

**nvidia-smi**



Which should give (ONLY if you have an Nvidia graphics processor):



```
PS E:\Documents\AI> nvidia-smi
Mon Jul 21 18:23:51 2025

+-----+
| NVIDIA-SMI 576.88                Driver Version: 576.88          CUDA Version: 12.9     |
+-----+-----+-----+-----+-----+-----+
| GPU   Name               Driver-Model  | Bus-Id          Disp.A | Volatile Uncorr. ECC |
| Fan  Temp   Perf          Pwr:Usage/Cap |      Memory-Usage | GPU-Util  Compute M. |
|====+=====+====+=====+=====+=====+
|  0   NVIDIA GeForce RTX 5070 Ti  WDDM          | 00000000:01:00:0  On      |           N/A       |
|  0%   37C    P0              50W / 300W     | 509MiB / 16303MiB |    0%      Default  |
|                                           |                       |           N/A       |
+-----+-----+-----+-----+-----+-----+

Processes:
+-----+-----+-----+-----+-----+-----+
| GPU  GI  CI           PID  Type  Process name                        GPU Memory |
|  ID  ID  ID                                     Usage   |
+-----+-----+-----+-----+-----+-----+
|  0   N/A N/A           2952  C+G  ...em32\ApplicationFrameHost.exe    N/A       |
|  0   N/A N/A           9880  C+G  ...ntrolPanel\SystemSettings.exe    N/A       |
|  0   N/A N/A          10324  C+G  C:\Windows\explorer.exe             N/A       |
|  0   N/A N/A          10356  C+G  ...indows\System32\ShellHost.exe    N/A       |
|  0   N/A N/A          10700  C+G  ...2txyewy\CrossDeviceResume.exe    N/A       |
|  0   N/A N/A          13996  C+G  ...ef.win7x64\steamwebhelper.exe    N/A       |
|  0   N/A N/A          14108  C+G  ...8bbwe\Microsoft.CmdPal.UI.exe    N/A       |
|  0   N/A N/A          14172  C+G  ...s\PowerToys.AdvancedPaste.exe    N/A       |
|  0   N/A N/A          14232  C+G  ...Toys\PowerToys.FancyZones.exe    N/A       |
|  0   N/A N/A          14672  C+G  ...y\StartMenuExperienceHost.exe    N/A       |
|  0   N/A N/A          16672  C+G  ...5n1h2txyewy\TextInputHost.exe    N/A       |
+-----+-----+-----+-----+-----+-----+
```

And match the CUDA version at the top right:

```
-----+
| CUDA Version: 12.9 |
+-----+
```

of the output to the version on the PyTorch website:

Compute Platform	CUDA 11.8	CUDA 12.6	CUDA 12.8	ROCm-6.3	CPU

if in doubt, use:

**pip3 install torch torchvision torchaudio**

```
pip3 install torch torchvision torchaudio
```

But preferably use a CUDA version if possible; it will make things much faster for you later on.