

Step 2: creating and activating the python virtual environment

In this step we will create a virtual environment in order to separate our python from the system's python.

-Python is an easy to learn, powerful programming language. It has efficient high-level data structures and a simple but effective approach to object-oriented programming. Python's elegant syntax and dynamic typing, together with its interpreted nature, make it an ideal language for scripting and rapid application development in many areas on most platforms

- A virtual environment is a Python environment such that the Python interpreter, libraries and scripts installed into it are isolated from those installed in other virtual environments, and (by default) any libraries installed in a "system" Python, i.e., one which is installed as part of your operating system.

The module used to create and manage virtual environments is called venv. venv will usually install the most recent version of Python that you have available. If you have multiple versions of Python on your system, you can select a specific Python version by running python3 or whichever version you want.

To create a virtual environment, decide upon a directory where you want to place it, and run the venv module as a script with the directory path:

```
python3 -m venv myenv
```

```
[pi@raspberrypi:~ $ cd Desktop/  
[pi@raspberrypi:~/Desktop $ ls  
env HAPPY image0.jpg image1.jpg image2.jpg image3.jpg image4.jpg myenv  
[pi@raspberrypi:~/Desktop $ cd myenv/  
[pi@raspberrypi:~/Desktop/myenv $ ls  
bin face_classification include lib pyvenv.cfg share  
[pi@raspberrypi:~/Desktop/myenv $ source bin/activate
```

```
cd myenv
```

Once you've created a virtual environment, you can activate it.

On Unix or MacOS, run:

```
source bin/activate
```