Install Python Ecosystem

Hypothesis
In this document we are assuming **Linux** as the target Operating System (OS).

Step 0: Check what is installed or not?

```
$ python --version
```

```
$ pyenv --version
```

If you have some responses to these two commands, then you can skip the following step and jump directly to Step 2.

Step 1: Install Pyenv, and then Python on top of it

Here we install Pyenv and use it to install several versions of Python without any conflict!

WARNING
To install Pyenv, you need Python. Fortunately for us, Python is now installed by default on any Linux or MacOS platform.
If it is not the case, just install the latest compliant Python version according your OS:

```
$ sudo apt install python
```

Execute the instruction found here:
https://github.com/pyenv/pyenv?tab=readme-ov-file#a-getting-pyenv

When done, execute the two commands of Step 0 and confirm Pyenv is installed.

Step 2: Install one or several specific versions of Python

For this course, we'll install Python version 3.12.0 as follows:

```
$ pyenv install 3.12.0
```

WARNING
Feel free to install a more recent version of Python. Confer to the Pyenv user manual to see how to do this.

Normally, this version should automatically become the default version of Python. Check if it is active:

```
$ pyenv versions
  system
* 3.12.0
```

Step 3: Python tools for "zen" development

You are now invited to get familiar with the following tools and package manager:

- **Virtualenv** or **Conda** (see references section of the support slides)
  - If you prefer playing with the command line, then you will enjoy Virtualenv,
  - If you prefer graphical user interfaces (GUI) then **Anaconda** and **Conda** will seem more friendly to you.
- Pip and/or Poetry (https://python-poetry.org/)

We won't spend a lot of time setting up these tools because their set up is performed using a single command line generally. Thus, we'll set up these tools when needed!

WARNING

You are strongly encouraged to adopt these tools if you want to be a "good" Python developer.

Take five minutes and go read the URLs provided for each of these tools. This time is not lost at all!

Troubleshooting

Contact the trainer.

END OF DOCUMENT.