Creating Virtual Environment:

Installing pyenv-win is not very straightforward due to how Windows 10/11 and PowerShell works, but if you follow those steps, it shouldn't be too much of a hassle:

- 1. Download pyenv-win ZIP-archive: pyenv-win
- **2.** Create a new folder .pyenv in your user folder with the name .pyenv. You can do this using the Explorer or the following PowerShell command:

1 mkdir \$HOME/.pyenv

- **3.** Extract the ZIP-archive and copy the pyenv-win folder and the .version file from the pyenv-win-master folder into the newly created .pyenv folder in your user folder.
- 4. Set the environment variables PYENV and PYENV HOME that point to the installation folder:
 - [System.Environment]::SetEnvironmentVariable('PYENV',\$env:USERPROFILE + "\.pyenv\pyenv-win\","User")

[System.Environment]::SetEnvironmentVariable('PYENV_HOME',\$env:USERPROFILE + "\.pyenv\pyenv-win\","User")

5. Add the bin folder to the PATH variable. Such that pyenv can be found when using the command line.

[System.Environment]::SetEnvironmentVariable('path', \$env:USERPROFILE + "\.pyenv\pyenv-win\bin;" + 1 \$env:USERPROFILE + "\.pyenv\pyenv-win\shims;" + [System.Environment]::GetEnvironmentVariable('path', "User"),"User")

Close the current PowerShell.

6. If you haven't enabled script execution yet, start a new PowerShell with admin privileges by right-clicking on the PowerShell icon in the start menu and choose *Run as administrator*. Otherwise, skip ahead to step 9.

Enter the following script in the power shell

¹ Set-ExecutionPolicy unrestricted

And press A to choose *Yes to ALL*. Afterward, you can close this PowerShell window and open a new one without admin privileges.

- **7.** Enter **pyenv** to run it.
- **8.** If you encounter a security warning from where you have to choose if you want to run pyenv you can disable this warning by "unblocking" the pyenv script with the following command:
 - 1 Unblock-File \$HOME/.pyenv/pyenv-win/bin/pyenv.ps1

Activation: 1. Install python different versions pyenv install -I 2. Set local and global version versions Pyenv global [python version] 3. Create python virtual environment Python -m venv .venv 4. Change directory to virtual environment Ls .\.venv\scripts\ **5.** Activate the environment .\.venv\scripts\activate