3.1.12- Lab- Explore Python Development Tool – pip, virtual environment

Contents

Required resources

1 PC with operating system of your choice

Virtual Box or VMWare

DEVASC Virtual Machine

Review the python Installation

python3 -V shows which python version is installed

output:

```
devasc@labvm:~$ python3 -V
Python 3.8.10
```

which python3 shows the directory fort he local python environment

output:

```
devasc@labvm:~$ which python3
/usr/bin/python3
```

PIP and Python Virtual Environments

pip3 install	PIP stands for Pip Installs Packages.
pip3 freeze	

Create a Python 3 virtual environment.

python3 -m venv (envirionment name)	-m switch tells Python to run the venv module

Activate and test the Python 3 virtual environment.

source devfun/bin/activate	activates the virtual environment
pip3 freeze	verifies that there are no additional Python packages currently installed in the (env name) environment.
pip3 install requests	installs the requests package
deactivate	deactivates the virtual environment

Check the current packages installed in the system environment.

python3 -m pip freeze	see what packages are installed in the system environment.
python3 -m pip freeze | grep requests	see the version of the requests package currently installed.

Sharing Your Virtual Environment

pip3 freeze > requirements.txt	Send the output of the pip3 freeze command to a text file called requirements.txt.
pip3 install -r requirements.txt	install the same packages that are installed in the devfun virtual environment.