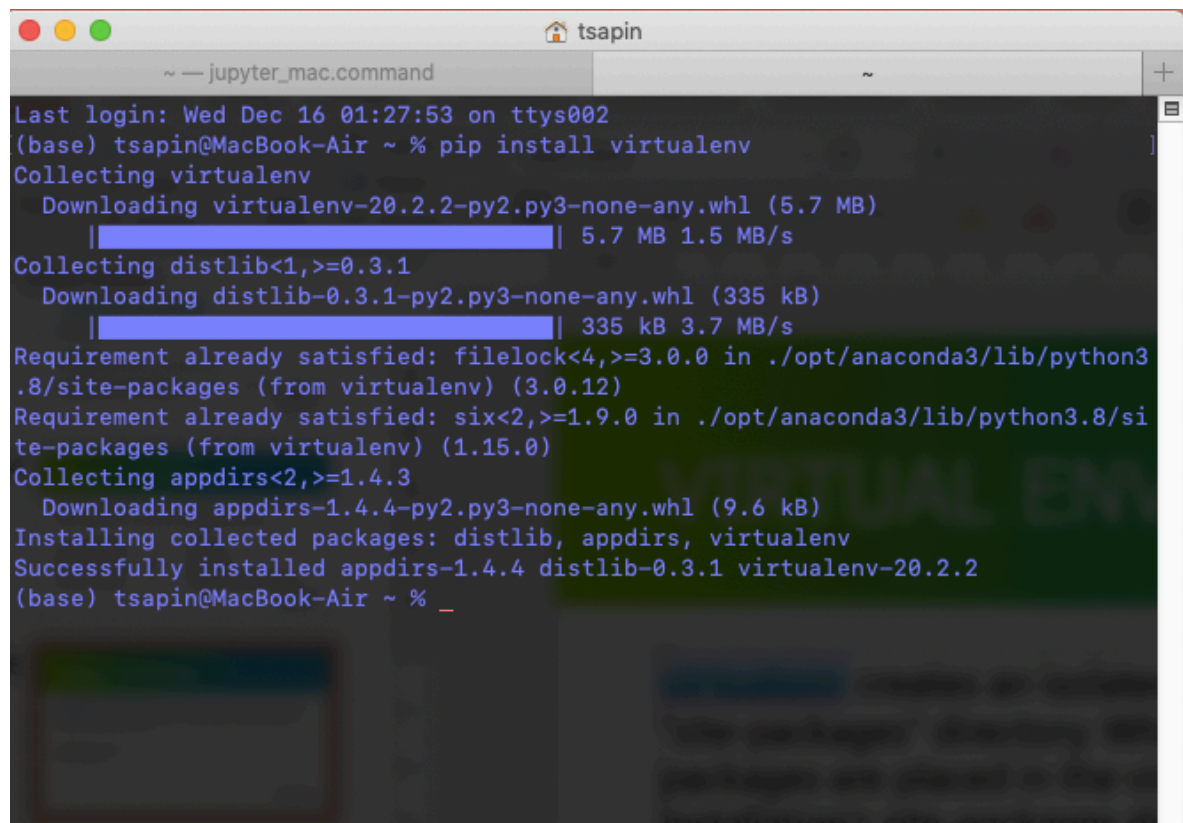


Python Core, SoftServe

Home Work 1, Task 4 | Oleksandr Tsapin

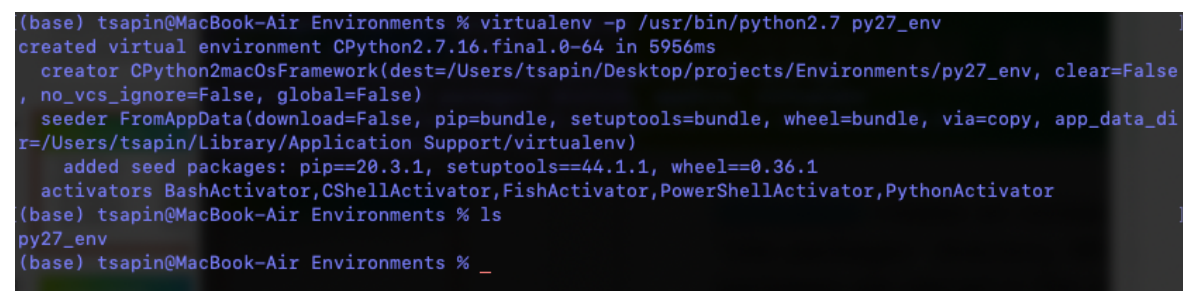
Install virtual environment. Install Python 2.7 within virtual environment. Complete Task 1, Task 2 and Task 3 using appropriate syntax.

Step 1. Instal virtualenv.

A terminal window titled 'tsapin' with a subtitle 'jupyter_mac.command'. The terminal shows the command 'pip install virtualenv' being executed. It displays the progress of downloading 'virtualenv-20.2.2-py2.py3-none-any.whl (5.7 MB)' and 'distlib-0.3.1-py2.py3-none-any.whl (335 kB)'. It also shows that requirements for 'filelock' and 'six' are already satisfied. Finally, it confirms the successful installation of 'appdirs-1.4.4', 'distlib-0.3.1', and 'virtualenv-20.2.2'.

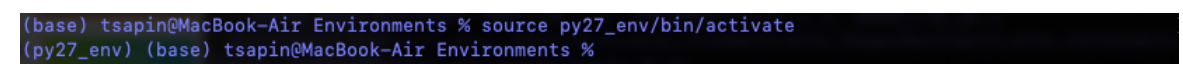
```
Last login: Wed Dec 16 01:27:53 on ttys002
(base) tsapin@MacBook-Air ~ % pip install virtualenv
Collecting virtualenv
  Downloading virtualenv-20.2.2-py2.py3-none-any.whl (5.7 MB)
    |████████████████████████████████████████| 5.7 MB 1.5 MB/s
Collecting distlib<1,>=0.3.1
  Downloading distlib-0.3.1-py2.py3-none-any.whl (335 kB)
    |████████████████████████████████████████| 335 kB 3.7 MB/s
Requirement already satisfied: filelock<4,>=3.0.0 in ./opt/anaconda3/lib/python3
.8/site-packages (from virtualenv) (3.0.12)
Requirement already satisfied: six<2,>=1.9.0 in ./opt/anaconda3/lib/python3.8/si
te-packages (from virtualenv) (1.15.0)
Collecting appdirs<2,>=1.4.3
  Downloading appdirs-1.4.4-py2.py3-none-any.whl (9.6 kB)
Installing collected packages: distlib, appdirs, virtualenv
Successfully installed appdirs-1.4.4 distlib-0.3.1 virtualenv-20.2.2
(base) tsapin@MacBook-Air ~ % _
```

Step 2. Create virtual environment specifying version of Python, and name it «py27_env».

A terminal window showing the command 'virtualenv -p /usr/bin/python2.7 py27_env'. The output indicates that a virtual environment was created successfully. It lists the creator as 'CPython2macOsFramework' and the seeder as 'FromAppData'. It also shows the added seed packages: 'pip==20.3.1', 'setuptools==44.1.1', and 'wheel==0.36.1'. The terminal ends with the prompt '(base) tsapin@MacBook-Air Environments % _'.

```
(base) tsapin@MacBook-Air Environments % virtualenv -p /usr/bin/python2.7 py27_env
created virtual environment CPython2.7.16.final.0-64 in 5956ms
  creator CPython2macOsFramework(dest=/Users/tsapin/Desktop/projects/Environments/py27_env, clear=False
, no_vcs_ignore=False, global=False)
  seeder FromAppData(download=False, pip=bundle, setuptools=bundle, wheel=bundle, via=copy, app_data_di
r=/Users/tsapin/Library/Application Support/virtualenv)
  added seed packages: pip==20.3.1, setuptools==44.1.1, wheel==0.36.1
  activators BashActivator,CShellActivator,FishActivator,PowerShellActivator,PythonActivator
(base) tsapin@MacBook-Air Environments % ls
py27_env
(base) tsapin@MacBook-Air Environments % _
```

Step 3. Activate virtual environment.

A terminal window showing the command 'source py27_env/bin/activate'. The output shows the prompt changing from '(base)' to '(py27_env)'.

```
(base) tsapin@MacBook-Air Environments % source py27_env/bin/activate
(py27_env) (base) tsapin@MacBook-Air Environments %
```

Check the version of the Python we are using.

```
(py27_env) (base) tsapin@MacBook-Air Environments % which python
/Users/tsapin/Desktop/projects/Environments/py27_env/bin/python
(py27_env) (base) tsapin@MacBook-Air Environments % python --version
Python 2.7.16
(py27_env) (base) tsapin@MacBook-Air Environments %
```

Step 4. Modify slightly the code to run in Python 2.7. Run all the tasks.

Task 1

Code

```
a = 5
b = 10
print "a = {}; b = {}".format(a,b)
print "a + b =", a + b
print "a - b =", a - b
print "a * b =", a * b
print "a / b =", float(a) / float(b)
```

Output

```
(py27_env) (base) tsapin@MacBook-Air HW % python task1_py27.py
a = 5; b = 10
a + b = 15
a - b = -5
a * b = 50
a / b = 0.5
```

Task 2

Code

```
name = raw_input("What is your name? ")
age = raw_input("How old are you? ")
residence = raw_input("Where do you live? ")
print "Hello ", name
print "Your age is ", age
print "You live in ", residence
```

Output

```
(py27_env) (base) tsapin@MacBook-Air HW % python task2_py27.py
What is your name? Sashko
How old are you? 34
Where do you live? Kyiv
Hello Sashko
Your age is 34
You live in Kyiv
```

Task 3

Code

```
(py27_env)
```

[illegible]