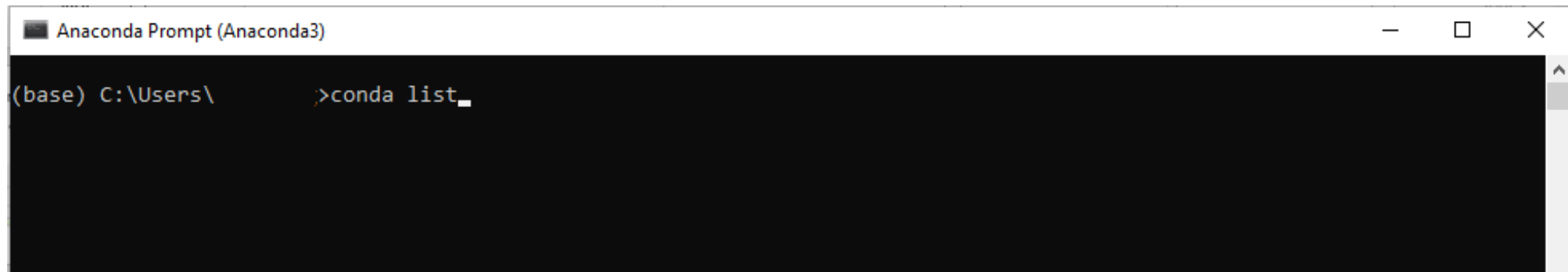


Working with Virtual Environment

Working with Virtual Environment

- **Windows User:** Launch **Anaconda Prompt (Anaconda3)**
- **Mac User:** Launch **Terminal (command + space bar -> type Terminal)**
- **Or open through Anaconda Navigator:**
Environment -> base(root) -> Open Terminal
- Try **conda list** and press **Enter**
- What happens?



```
Anaconda Prompt (Anaconda3)
(base) C:\Users\ >conda list_
```

Home

Environments 

Learning

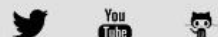
Community



Premium packages and dedicated support.

[Documentation](#)

[Anaconda Blog](#)



Search Environments

Installed

Channels

Update index...

Search Packages

base (root)

isom3400

Open Terminal

Open with Python

Open with IPython

Open with Jupyter Notebook

✓ anaconda

✓ anaconda-client

✓ anaconda-project

✓ anyio

✓ appdirs

✓ applaunchservices

✓ appnope

✓ appscript

✓ argh

✓ argon2-cffi

✓ asn1crypto

✓ astroid

✓ astropy

✓ async-generator

✓ async_generator

✓ atomicwrites

Description

Version

0.1.0

0.7.12

2021.05

↗ 1.7.2

↗ 0.9.1

2.2.0

1.4.4

0.2.1

0.1.2

1.1.2

0.26.2

20.1.0

1.4.0

↗ 2.5

↗ 4.2.1

1.10

1.10

1.4.0

+

Create

📄

Clone

📁

Import

🗑️

Remove

363 packages available

Working with Virtual Environment

- Check Python version: **python --version**
- What environments do you have in your computer? **conda info --envs**

```
(base) C:\Users\ >conda info --envs
# conda environments:
#
?
```

Working with Virtual Environment

- Command to create an environment:
- **conda create --name *environment name* python=*version number***
- OR **conda create -n *environment name* python=*version number***
- By default, the command will create an environment with an updated **python version**
- If you need an older version, specify it (e.g. python=3.8)
- Try to create one by yourself

```
(base) C:\Users\ >conda create --name labdemo python_
```

Working with Virtual Environment

- Type **y** and press **Enter** to proceed

```
Anaconda Prompt (Anaconda3) - conda create --name labdemo python

pip-20.3.3      | py39haa95532_0      | 1.8 MB
python-3.9.1    | h6244533_2          | 16.4 MB
setuptools-52.0.0 | py39haa95532_0      | 725 KB
sqlite-3.33.0   | h2a8f88b_0          | 809 KB
tzdata-2020f    | h52ac0ba_0          | 113 KB
vc-14.2         | h21ff451_1          | 8 KB
vs2015_runtime-14.27.29016 | h5e58377_2        | 1007 KB
wheel-0.36.2    | pyhd3eb1b0_0        | 33 KB
wincertstore-0.2 | py39h2bfff1b_0      | 15 KB
-----
Total:          | 25.9 MB

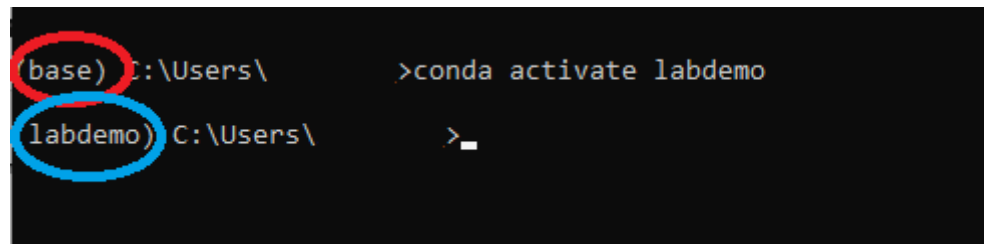
The following NEW packages will be INSTALLED:

ca-certificates | pkgs/main/win-64::ca-certificates-2021.1.19-haa95532_0
certifi         | pkgs/main/win-64::certifi-2020.12.5-py39haa95532_0
openssl         | pkgs/main/win-64::openssl-1.1.1i-h2bfff1b_0
pip             | pkgs/main/win-64::pip-20.3.3-py39haa95532_0
python          | pkgs/main/win-64::python-3.9.1-h6244533_2
setuptools      | pkgs/main/win-64::setuptools-52.0.0-py39haa95532_0
sqlite          | pkgs/main/win-64::sqlite-3.33.0-h2a8f88b_0
tzdata          | pkgs/main/noarch::tzdata-2020f-h52ac0ba_0
vc              | pkgs/main/win-64::vc-14.2-h21ff451_1
vs2015_runtime | pkgs/main/win-64::vs2015_runtime-14.27.29016-h5e58377_2
wheel           | pkgs/main/noarch::wheel-0.36.2-pyhd3eb1b0_0
wincertstore    | pkgs/main/win-64::wincertstore-0.2-py39h2bfff1b_0
zlib            | pkgs/main/win-64::zlib-1.2.11-h62dcd97_4

Proceed ([y]/n)? y_
```

Working with Virtual Environment

- After the creation of environment, we are still working with the base environment.
- Activate environment: **conda activate environment name**

A terminal window with a dark background. The first line shows the prompt '(base) C:\Users\' followed by the command '>conda activate labdemo'. The second line shows the prompt '(labdemo) C:\Users\' followed by '>'. The '(base)' prompt is circled in red, and the '(labdemo)' prompt is circled in blue.

```
(base) C:\Users\ >conda activate labdemo
(labdemo) C:\Users\ >
```

Working with Virtual Environment

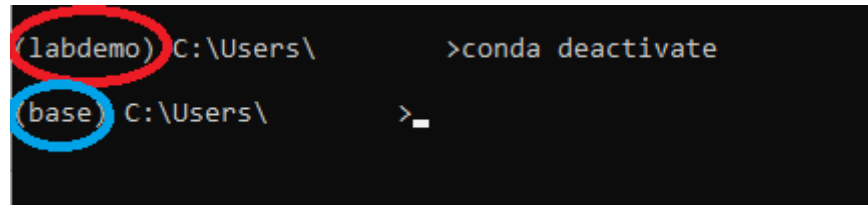
- Try **conda list** and **python --version**
- Any difference compared to the base environment you are using?
- Try **conda install ipykernel**

```
(labdemo) C:\Users\          >conda list
# packages in environment at C:\Users\          \Anaconda3\envs\labdemo:
#
?

(labdemo) C:\Users\          >python --version
Python ?
```


Working with Virtual Environment

- If you do not want to work in this environment anymore, you can simply type **conda deactivate** to go back to the base environment
- Delete environment: **conda env remove --name environment name**

A terminal window with a black background and white text. The first line shows the prompt '(labdemo) C:\Users\' followed by the command '>conda deactivate'. The second line shows the prompt '(base) C:\Users\' followed by a cursor. A red circle highlights the '(labdemo)' prompt, and a blue circle highlights the '(base)' prompt.

```
(labdemo) C:\Users\ >conda deactivate  
(base) C:\Users\ >_
```

Virtual Environment and VS Code for Python Programming

(Quick Start)

By James S. H. Kwok

Virtual Environment

Required	Optional
Step 1: Go and launch Terminal	
	Step 2: change to the destination folder cd << destination>>
	Step 3: Show all virtual environment conda env list
Step 4: Create a virtual environment conda create -n isom3400 python=3.8	
Step 5: Activate the virtual environment conda activate isom3400	
	Step 6: Show all package conda list
Step 7: Install a package conda install pandas	
	Step 8: Exit the virtual environment conda deactivate

VS Code

Step 1: Launch VS Code start code
Step 2 (optional): Change to working directory File – Open... - << destination directory >>
Step 3: New a py file New File Or Click “New File” icon, and enter “isom3400_variable.py”
Step 4: Use #%% to separate sections of code #%% print("Hello World!")