DSC 80 Discussion

Dylan Stockard

Hi I'm Dylan!

- Seattle native
- 2nd year MS in Data Science
- MMA, hiking, road trips

What not to do at the Grand Canyon

Your Turn!

Name

Hometown

Hobby(s)

Favorite building or art installation on campus

Discussion Overview

Usual Discussion

- Go over the prior week's lab
- Discuss learning objectives of the lab
- Explore different implementations of the solution.

After discussion, a reflection form is available on Gradescope to be completed by midnight.

0.25% of extra credit will be awarded to those who submit the lab, attend discussion section, *and* complete the reflection form.

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Today's Discussion

- Introductions
- Command line/terminal crash course

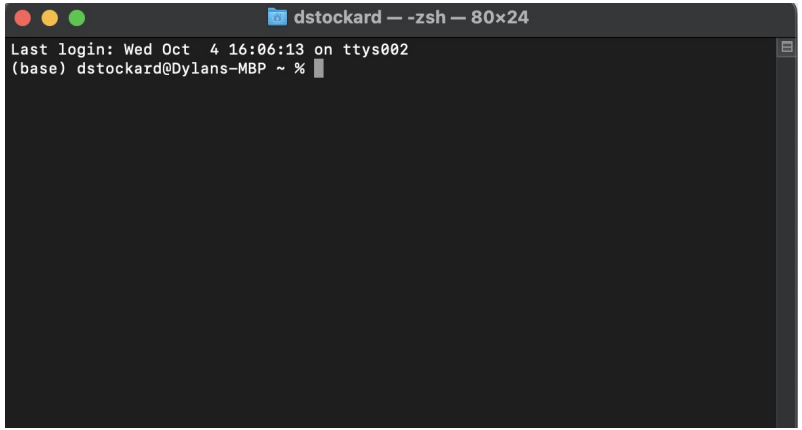
PLEASE try to set up your environment ASAP

Instructions under the "Tech Support" page of the course website

Command Line/Prompt/Terminal

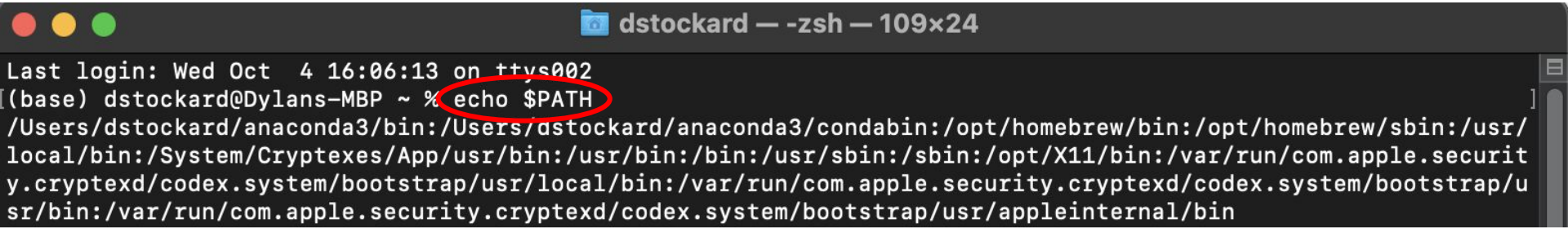
A way to talk with your computer to manage files, run scripts, and more!

We will not be testing you on your skills here, but you may need them for logistics in this class.



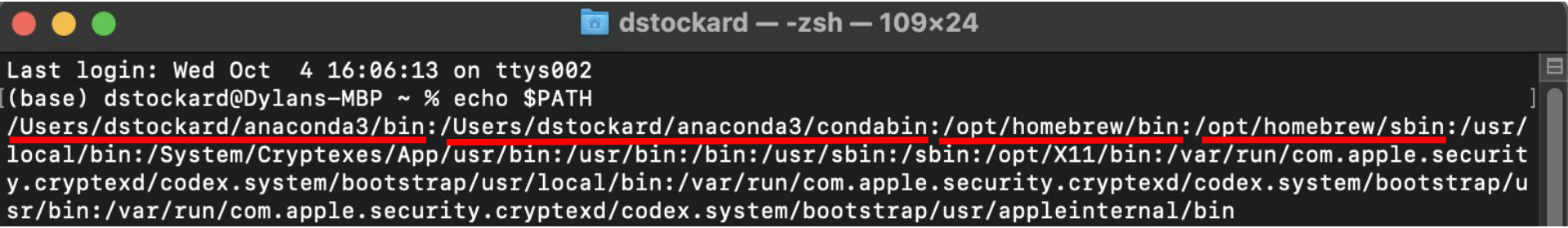
What is a PATH?

A list of directories that tells your system where to run executables from



What is a PATH?

A list of directories that tells your system where to run executables (like pip) from



Dylan 🙋💬:

```
pip install -r requirements.txt
```

Laptop 💻👀

```
/Users/dstockard/anaconda3/bin:/Users/dstockard/anaconda3/condabin:/opt/homebrew/bin:/opt/homebrew/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/usr/bin:/bin:/usr/sbin:/sbin:/opt/X11/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/appleinternal/bin
```

Laptop 💻🔎: `/Users/dstockard/anaconda3/bin/pip`

Note: You can see where the first executable in your path is by prompting “which {executable name}”

Environments

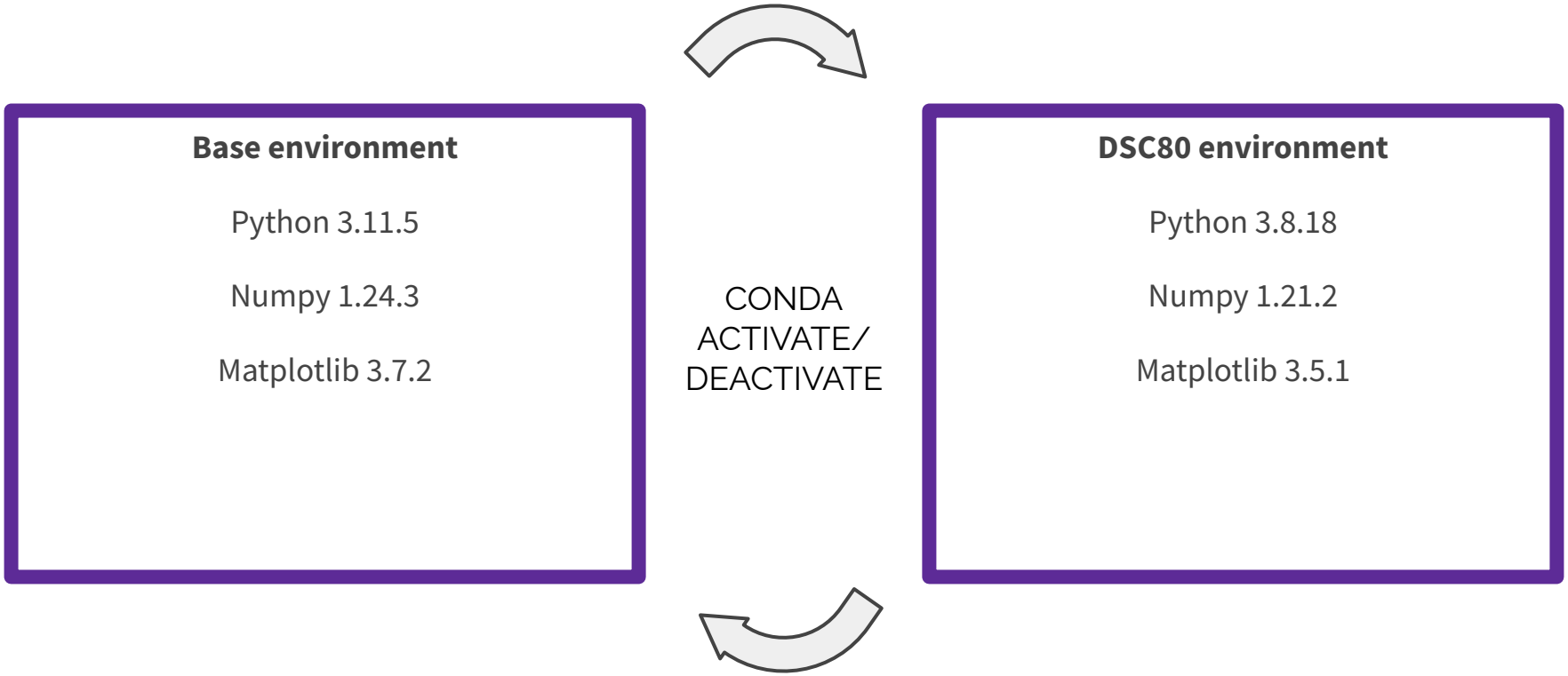
Python has a lot of useful libraries that make life easier…

- Numpy
- Pandas
- Matplotlib

These libraries are constantly updating, but not at the same time.

However, these libraries often rely on certain versions of one another.

We use a specific versions for this class so our code is all consistent.


Base environment
Python 3.11.5
Numpy 1.24.3
Matplotlib 3.7.2
CONDA ACTIVATE/ DEACTIVATE
DSC80 environment
Python 3.8.18
Numpy 1.21.2
Matplotlib 3.5.1

DSC80 Environment PATH

```
(base) dstockard@Dylans-MBP ~ % conda activate dsc80
(dsc80) dstockard@Dylans-MBP ~ % echo $PATH
/Users/dstockard/anaconda3/envs/dsc80/bin:/Users/dstockard/anaconda3/condabin:/opt/homebrew/bin:/opt/homebrew
/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/usr/bin:/bin:/usr/sbin:/sbin:/opt/X11/bin:/var/run/com.ap
ple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com.apple.security.cryptexd/codex.system/
bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/appleinternal/bin
```

DSC80 Environment PATH

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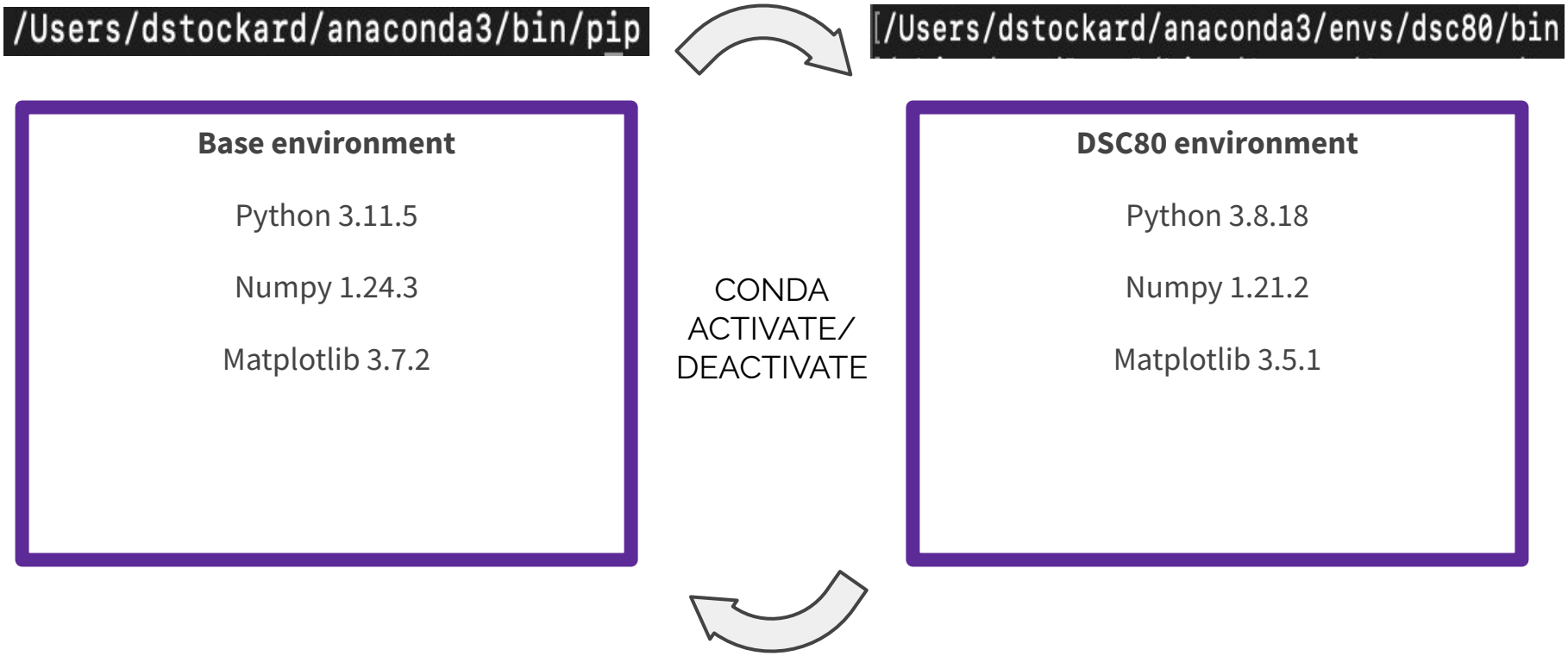
[/Users/dstockard/anaconda3/envs/dsc80/bin:/Users/dstockard/anaconda3/condabin:/opt/homebrew/bin:/opt/homebrew]
[/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/usr/bin:/bin:/usr/sbin:/sbin:/opt/X11/bin:/var/run/com.ap]
ple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com.apple.security.cryptexd/codex.system/
bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/appleinternal/bin
```

Dsc80 environment PATH `[/Users/dstockard/anaconda3/envs/dsc80/bin`

Base environment PATH `/Users/dstockard/anaconda3/bin`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Quick note...

This class distributes assignments and lecture notebooks through our github repository

`dsc80-2023-fa`

To set up, run

```
git clone https://github.com/dsc-courses/dsc80-2023-fa
```

To get new material that we release, `cd` to `dsc80-2023-fa` and run

```
git pull
```

Before you leave...

Go to dsc80.com and follow the instructions on the “Tech Support” page to set up your environment.

You are good to go once you have ran the first cell of lab 1 and have no errors

Happy Friday!