Lab Session 1

CIS 4730

Install Anaconda

A popular Python and R distribution

Provides Python and popular libraries

Installation:

https://www.anaconda.com/products/individual

Anaconda Installers

Windows ⊞	MacOS	Linux 🐧
Python 3.7	Python 3.7	Python 3.7
64-Bit Graphical Installer (466 MB)	64-Bit Graphical Installer (442 MB)	64-Bit (x86) Installer (522 MB)
32-Bit Graphical Installer (423 MB)	64-Bit Command Line Installer (430 MB)	64-Bit (Power8 and Power9) Installer (276 MB)
Python 2.7	Python 2.7	
64-Bit Graphical Installer (413 MB)	64-Bit Graphical Installer (637 MB)	Python 2.7
32-Bit Graphical Installer (356 MB)	64-Bit Command Line Installer (409 MB)	64-Bit (x86) Installer (477 MB)
		64-Bit (Power8 and Power9) Installer (295 MB)

Installation guide:

Windows – https://docs.anaconda.com/anaconda/install/windows/
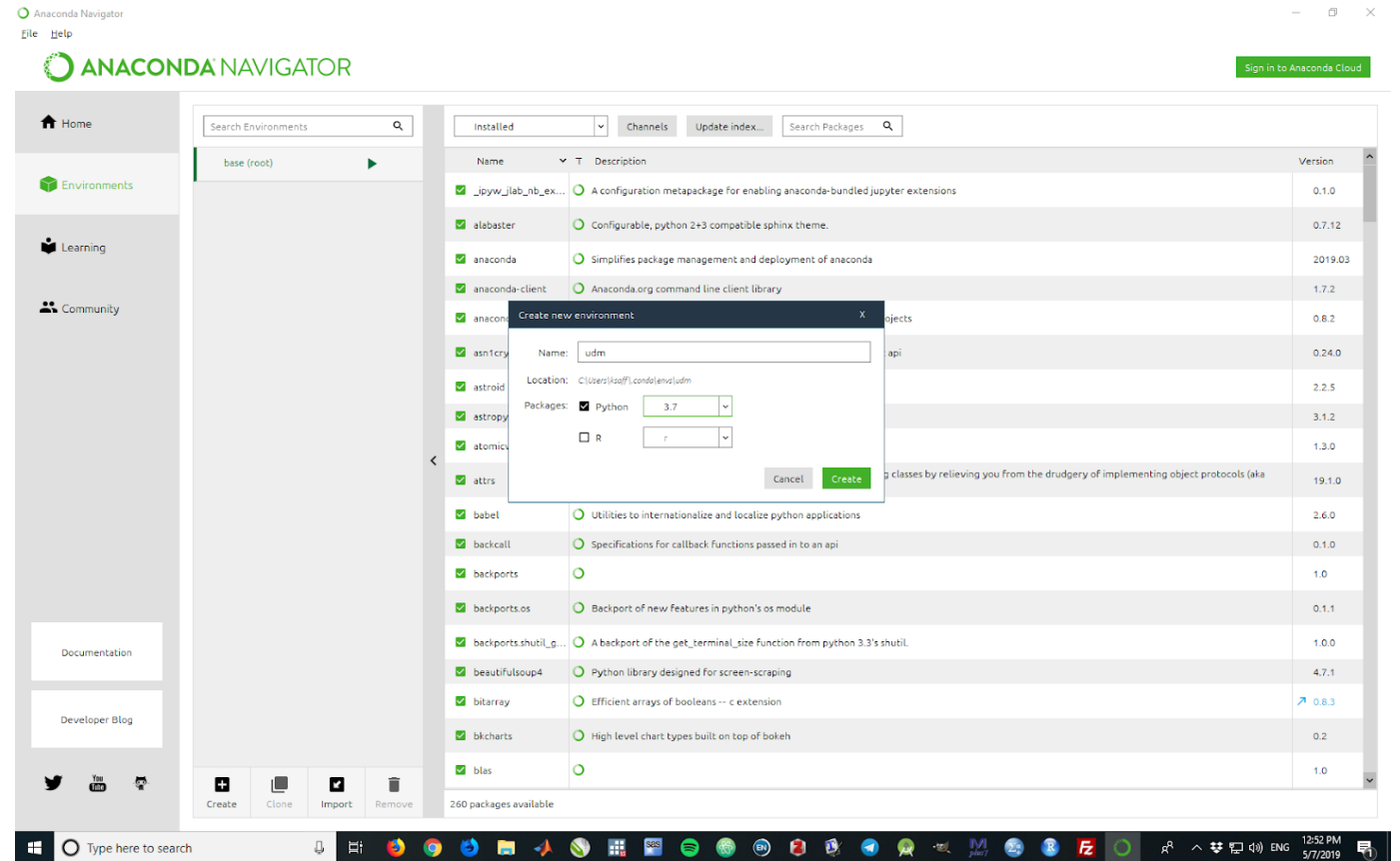
Mac – https://docs.anaconda.com/anaconda/install/mac-os/
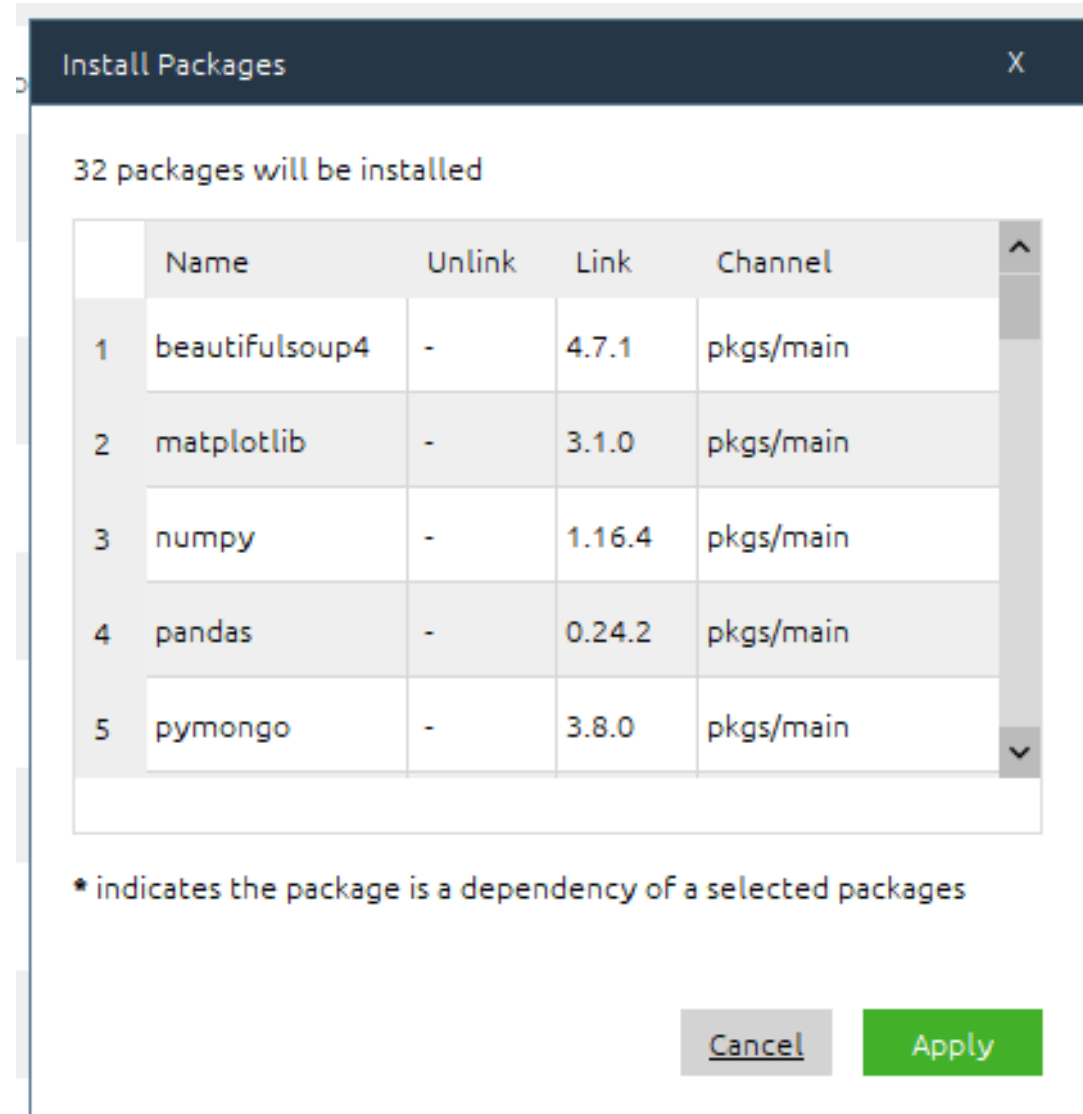
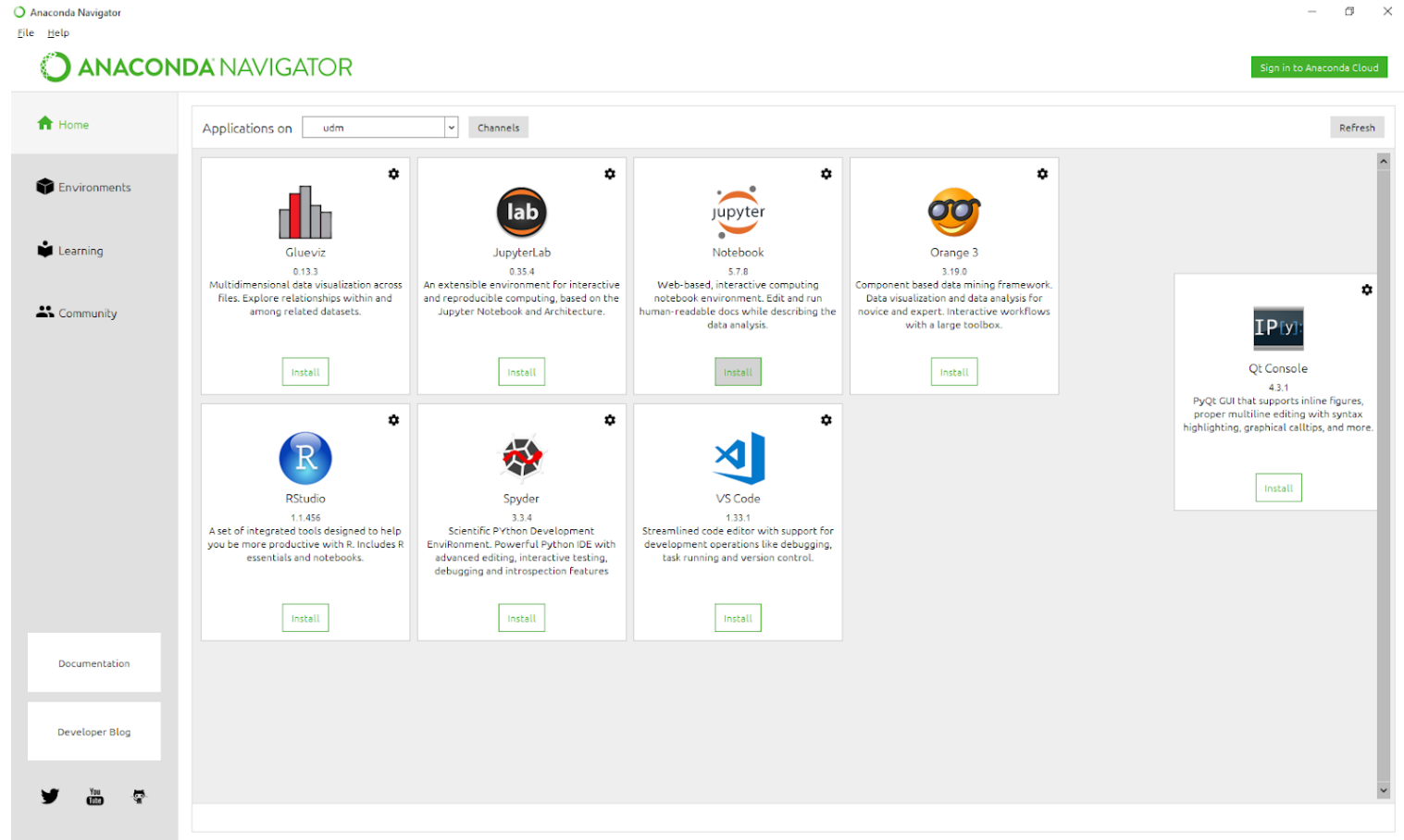# Create a virtual environment

Why do we need virtual environments?

Install these libraries in the virtualenv

- Now
  - numpy
  - pandas
- After class
  - matplotlib
  - pymongo
  - beautifulsoup4
  - scikit-learn

Install Packages

X

32 packages will be installed

	Name	Unlink	Link	Channel
1	beautifulsoup4	-	4.7.1	pkgs/main
2	matplotlib	-	3.1.0	pkgs/main
3	numpy	-	1.16.4	pkgs/main
4	pandas	-	0.24.2	pkgs/main
5	pymongo	-	3.8.0	pkgs/main

* indicates the package is a dependency of a selected packages

Cancel   Apply

ython common libraries, see https://github.com/abseil/abseil-py

Install Jupyter Notebook

File   Help

○ ANACONDA NAVIGATOR

Sign in to Anaconda Cloud

🏠 Home

📦 Environments

📖 Learning

👥 Community
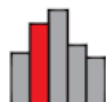
Applications on   [udm ▾]   Channels

Refresh

Notebook
⚙

Notebook
5.7.8
Web-based, interactive computing notebook environment. Edit and run human-readable docs while describing the data analysis.

Launch

Glueviz
⚙

Glueviz
0.13.3
Multidimensional data visualization across files. Explore relationships within and among related datasets.

Install

JupyterLab
⚙

JupyterLab
0.35.4
An extensible environment for interactive and reproducible computing, based on the Jupyter Notebook and Architecture.

Install

Orange 3
⚙

Orange 3
3.19.0
Component based data mining framework. Data visualization and data analysis for novice and expert. Interactive workflows with a large toolbox.

Install

Qt Console
⚙

Qt Console
4.3.1
PyQt GUI that supports inline figures, proper multiline editing with syntax highlighting, graphical calltips, and more.

Install

RStudio
⚙

RStudio
1.1.456
A set of integrated tools designed to help you be more productive with R. Includes R essentials and notebooks.

Install

Spyder
⚙

Spyder
3.3.4
Scientific PYthon Development EnviRonment. Powerful Python IDE with advanced editing, interactive testing, debugging and introspection features
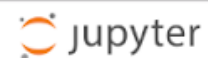
Install

VS Code
⚙

VS Code
1.33.1
Streamlined code editor with support for development operations like debugging, task running and version control.

Install

Documentation

Developer Blog

localhost:8888/tree

jupyter

Quit   Logout

Files   Running   Clusters

Select items to perform actions on them.   Upload   New ▾   ⟳

☐ 0 ▾   📁 /   Name ↓   Last Modified   File size

☐   📁 3D Objects   4 months ago
☐   📁 Anaconda3   3 minutes ago
☐   📁 Calibre Library   3 months ago
☐   📁 Contacts   4 months ago
☐   📁 Desktop   12 minutes ago
☐   📁 Documents   3 minutes ago
☐   📁 Downloads   16 minutes ago
☐   📁 Favorites   4 months ago
☐   📁 Google Drive   3 days ago
☐   📁 Links   4 months ago
☐   📁 Music   4 months ago
☐   📁 OneDrive   11 days ago
☐   📁 Pictures   2 minutes ago
☐   📁 Saved Games   4 months ago
☐   📁 Searches   4 months ago
☐   📁 smartpls_workspace   2 months ago
☐   📁 Videos   4 months ago
☐   📁 Zotero   9 days ago