

SECTION 2: PYTHON SETUP / 54 mins, 5 parts

• 2/5 Installing Python (Step by Step)

○ -> Introduction to the install / Anaconda environment

- -> this installation is with Anaconda -> it's based off of Python in a Jupyter environment (.py vs .ipynb)
- -> the course is using the Jupyter environment from Anaconda -> because the UI is a lot nicer for learning it
- -> you're not just installing the language, it's the interface for using it as well
- -> **there are some online no install versions of Python -> these sites can change and become paid**
- -> **installing Python with the Anaconda distribution**
 - -> this includes libraries
 - -> www.anaconda.com/downloads

○ -> Stages in the download process

▸ -> download Anaconda

- -> **go to the Anaconda website**
 - -> libraries and tools there
- -> **there is a windows / mac / linux installer**
 - -> there is a graphical installer, and then a command line installer
 - -> **there is documentation (docs) -> this contains more in depth steps and often examples etc**
 - -> **downloading the right version of Anaconda**
 - -> choosing the destination
 - -> licence agreement
 - -> **'distribution' is another word for 'version'**
 - -> Pycharm is another tool you can install
 - -> there are a lot of additional tools you can install

▸ -> open Anaconda

- -> he's opened it after downloading it
- -> the GUI opens
- -> there is Jupyter lab, etc - a lot of different options
- -> **there are a lot of different developer environments in Anaconda Navigator -> with this Python course we're using Jupyter Notebooks**
- -> **other options in Anaconda**
 - -> there is an environments tab
 - -> you can create VMS
 - -> learnings
 - -> documentation (data / ml)
 - -> community
 - -> links to events / forums (data / ml)

▸ -> open Jupyter Notebooks

- -> it opens the section in the browser
- -> it's not using the internet
- -> **you can see in the browser**
 - -> what's being listed is the different files on the computer
 - -> like finder but on chrome

- -> **you can create folders there etc**
 - -> in this case, it's saying that the folder is empty
 - -> he's created a new folder (in the chrome environment)
 - -> you can also delete them from the offline chrome environment
 - -> then a new notebook
- -> **he's created a Jupyter Notebook**
 - -> **inside it**
 - -> **there are two types of cell**
 - -> **the code cells**
 - -> he's typed maths and then is running the maths -> **it's essentially a giant calculator**
 - **# <- comments in Python**
 - -> **the markdown cells**
 - -> unlike .py files -> in Jupyter Notebooks, you can have text
 - -> **the notebooks for the course which they work from are on git -> can clone them etc**
 - -> there is a help section in the Jupyter GUI
- -> **no install online Python options**
 - -> **jupyter.org/try**
 - -> this is more convenient for testing a section of Python
 - -> **nothing in this gets saved, the notebook is hosted online / on the cloud**
 - -> it's for testing sections of code etc
 - -> **you can download the code you test as a separate Jupyter notebook**
 - -> **Google Collab Online Notebooks**
 - -> ML and data science
 - -> **this is a google service, you need a gmail account to access it**
 - -> **it will save the notebook and you can use data from your google drive**
 - -> to run the code - it looks like - when you run code on a quantum computer or HPC facility -> it's running it
 - -> **Repl.it <- write Python code, interpret it and have it run**
 - -> this is a browser based IDE -> free version and paid version
 - -> **this is more intended for collaborative coding**
 - -> **why you shouldn't use them**
 - -> it's hard to upload your data and notebooks
 - -> they can be paid subscription services / change this etc
- -> **he's suggesting to use a local environment**