Getting Started with Python

Installing Python

- Downloading and installing **Anaconda** on your PC is a good place to start. The Anaconda Individual Edition is open source and free of charge.
- Anaconda comes with JupyterLab and Jupyter Notebook. The latter is convenient because it allows you to run segments of your code separately and immediately visualise or retrieve outputs in your Internet browser window.
    - Files with extension **.ipynb** are Jupyter Notebook files. A Jupyter Notebook is usually opened by typing **jupyter notebook** in your command prompt window. If your PC has multiple drives and you want to open Jupyter Notebook on a specific drive, please navigate to that drive in the command prompt window (e.g. by typing D: and Enter) before launching the Notebook.
- If you are going to write more complex Python code or scripts, you may also want to download PyCharm. You can create and run **.py** files in PyCharm.
- Anaconda comes with a large number of pre-installed packages. Information on additional packages can be found on the Python Package Index (PyPi). More information on how to install packages can be found here although a simple **pip install <package name>** in your command prompt window is probably all you need.

Python for Beginners

- There are lots of resources for learning Python online, many of them fully or partially free. The selection below is by no means exhaustive.
- Codecademy has many free Python courses. Learn Python 3 is a good starting point for beginners.
- Training websites such as **Udemy** have many free Python courses.
- There are also many **phone apps** available, e.g. **Python 3 Tutorials**.
- **Youtube** has many free tutorials:
    - Python Tutorial for Absolute Beginners #1 - What Are Variables?
    - Python for Beginners - Learn Python in 1 Hour
    - Learn Python - Full Course for Beginners
- For additional references to courses: 15 Free Courses to Learn Python in 2021.
- There are also fee-based courses available which give you a certificate upon completion. However, given the extent of free material available, you should carefully consider the pros and cons of paying for a course.

Python Projects

- There is no better alternative to learning Python to working on specific projects.
- You can create your own projects based on publicly available data (e.g. from Yahoo Finance, Quandl) or alternatively search for interesting Kaggle Competitions that can be done in Python:
    - The Titanic competition is a popular application of machine learning, for example.
- If you get stuck on your project, search Stackoverflow and you'll probably find your question answered in at least five different ways!