Computing for Mathematics: Handout 1

This handout contains a summary of the topics covered and an activity to carry out prior or during your lab session.

At the end of the handout is a specific coursework like exercise.

For further practice you can do the exercises available at the Using notebooks chapter of Python for Mathematics.

1 Summary

The purpose of this handout is to cover Using Notebooks which corresponds to the Using notebooks chapter of Python for Mathematics.

The topics covered are:

- Installing Anaconda
- Starting a notebook server
- Creating a new notebook
- Running some python code
- Writing some markdown
- Outputting notebooks to a different format

2 Activity

There are instructions for how to do all of this is in the How to section of the Using Notebook chapter of Python for Mathematics.

- 1. Install the Anaconda distribution.
- 2. Start a Jupyter notebook server.
- 3. Create a new notebook file.
- 4. Write some python code to compute 2 + 2.
- 5. Write the following in a markdown cell:

As well as using Python in Jupyter notebooks we can also write using Markdown. This allows us to use basic Δx as a way to display mathematics. For example:

- 1. \$\frac{2}{3}\$
- 2. \$\sum_{i=0}^n i\$
- 6. Save the notebook as an html file and open it.

3 Coursework like exercise

To ensure you are able too download and open the individual coursework when it is released: download and open the notebook available at 10.5281/zenodo.7118738.