Computing for Mathematics: Handout 1

This handout contains a summary of the topics covered and an activity to carry this week.

If you are having difficulties installing any of the required software please come to the optional drop in session scheduled on Wednesday from 1000 until 1200 in 2.35.

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 $\LaTeX$ 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 to download and open the individual coursework when it is released: download and open the notebook available at 10.5281/zenodo.7118738.