

Computing for mathematics: week 3

Data structures and recurrence

Aims of this week

At the end of this lecture students will be:

- Understand lists and dictionaries in Python;
- Write and read data to/from files (using the csv module and otherwise);
- Write basic recurrence

Timeline

Lab sheet

- Understanding lists and certain functions that work on lists;
- Understanding hash tables;
- Using the write, read function;
- Using the csv module;
- A very basic recurrence function.
- Fibonacci using recurrence
- Another recurrence exercise
- Create your own Hash table

Lecture

- 0 - 5 mins: Recap
- 5 - 15 mins: Power of dictionaries and recurrence
- 15 - 35 mins: Solutions of Lab sheet
- 35 - 45 mins: Questions?
- 45 - 50 mins: Introduction to next week

After the lecture Students will be given access to lab sheets and pointed towards reading.

Assessment

This will be assessed in the class test.