

Programming A

3rd Weekly Note (E14, Week 38)

Exam Project

There are two projects to choose from: one called “Fractals and the Beauty of Nature” and “From DNA to Proteins”. You will find the description on the course home page latest at the beginning of the week:

<http://www.imada.sdu.dk/~petersk/DM536/#project>

<http://www.imada.sdu.dk/~petersk/DM550/#project>

Reading for Week 38

- Chapters 7-10 of “Think Python: How to Think Like a Computer Scientist”

Lecture: Thursday, September 18, 16-18 (U140)

We will start by repeating the idea of recursive functions. Please take a look at the slides from the previous lecture and try to understand what questions you want to ask during the lecture.

Then we will learn about programming using iteration (while loops and for loops). Finally, we will learn how to work with strings by understanding them as sequences of characters.

Lecture: Friday, September 19, 14-16 (U55)

First, we will introduce the first part of the exam project.

Then we will deepen our understanding of strings as sequences and learn about other sequences in Python, in particular about lists.

Labs: see detailed schedule on course home page

First, do Exercises 5.3–5.4. Then, do Exercises 6.5–6.6. Finally, do Exercises 7.1–7.5.

Study groups: see your personal schedule

The first year students meet with their study group. Please prepare for the meeting by reading the descriptions of the project. Find out what parts of the project you have trouble understanding and help each make sense of it.

In small groups, sit down and jointly make a comparison chart for the two possible projects. What are advantages? What are disadvantages? Where are the challenges? Discuss your preferences.

The regroup (if necessary) such that you are in small groups where everyone is interested in the same project. Together work through the description one more time and clarify what exactly you have to do. Make a list what concepts you already know and what tasks you can already start on and where you need to learn more.