

Programming A

2nd Weekly Note (E13, Week 37)

Announcement

For those of you seeking some additional challenges, there is a set of additional exercises:

<http://dm502.vigtig.it/>

If you feel like some additional practice, give these a try.

Reading for Week 37

- Chapters 5-6 of “Think Python: How to Think Like a Computer Scientist”

Lecture: Monday, September 9, 08-10 (U27)

In this lecture we will repeat and extend what we know about functions. Additionally, we will introduce conditional execution. Finally, we will use functions and conditional execution to solve problems by using recursive functions.

Exercises: see detailed schedule on course home page

First do Exercises 5.1–5.2 from the textbook.

Then do Exercises 6.1, 6.3, and 6.7. Continue with 6.4.

Finally, discuss recursive definitions in mathematics. For example, take a look at the fibonacci numbers and their definition. Find and discuss other examples of recursion, e.g., fractals in nature like the Koch snowflake or the Sierpinski triangle.

Labs: see detailed schedule on course home page

First do Exercises 3.1–3.5 from the textbook. Then install the `swampy` package (if it is not installed yet):

<http://www.greenteapress.com/thinkpython/swampy/install.html>

Do the exercises in Section 4.3 of the textbook as well as Exercises 5.3–5.4. If you are fast, also do Exercises 4.1–4.4 of the textbook.

Then do Exercises 6.5–6.6.