

# Introduction to Programming

## 5th Weekly Note (E17, Week 40)

### Reading for Week 39

- **Obligatory:** Chapters 14–16 of “Think Python”
- *Supplementary:* Chapters 18 and 19 of “The Coder’s Apprentice”

### Project

The group project for the Python part is available from the course home page.

### Lecture: Monday, October 2, 12-14 (U140)

We will learn about tuples. Then we will start looking into strategies for selecting data structures, i.e., we tried to get a better understanding for when to use which (combination of) data structures.

### Lecture: Thursday, October 5, 14-16 (U140)

In the first part of the lecture, we extend our understanding for which data structures to select and how to work with them.

In the second part of the lecture, we extend our knowledge about file handling and introduce object-orientation.

### Labs: see detailed schedule on course home page

- **Obligatory:** Exercise 1 from Chapter 12. Exercise 1 from Chapter 14.
- *Supplementary:* Exercise 2 from Chapter 12. Exercise 3 from Chapter 14.
- **Challenging:** Write functions that read the headers of GIF, PNG, and JPEG files and output information about the images. Do not use library, but access the files byte by byte.

### Exercises: see detailed schedule on course home page

The focus will be on the project. Together with your TA make sure that everyone has formed groups, that everyone understands what products have to be delivered, that the groups have started or know where to start. Then try to identify challenges regarding the design and implementation. Exchange knowledge between groups, but don’t exchange code or other written artefacts.