

Introduction to Programming

4th Weekly Note (E14, Week 39)

Reading for Week 39

- Chapters 11-12 of “Think Python: How to Think Like a Computer Scientist”

Lecture: Friday, September 26, 14-16 (U47)

In this lecture, we will learn about lists, dictionaries, and tuples. Then we will try to understand which data structures are useful in which situations. Finally, if time permits, we will learn more about file handling.

Exercises: see detailed schedule on course home page

Your first task is to give your teaching assistant feedback on you progress with the project. The teaching assistant will note down i) how many people have not begun yet (hopefully == None), ii) how many people have started, but are somewhat stuck, iii) how many people have started and are progressing nicely, and iv) how many people have finished.

Start with Exercises 7.1–7.5. Then do Exercises 8.1, 8.4–8.7, and 8.12 from the textbook.

Labs: see detailed schedule on course home page

Do Exercises 9.1–9.6 from the textbook. Implement Exercises 9.7–9.9. Then do Exercises 10.1–10.5.

If you are very quick, do Exercises 10.6–10.10.

Study groups: see personal schedule

Use your study group to reflect on your experience with the project and to provide or receive help, depending on how far you have gotten with it. Start by individually reflecting on the project and identify each 3 challenges that you encountered during the project. Mark them as “SOLVED” or “PENDING” depending on whether you found a solution yet. Challenges can be both technical or process-oriented. An example could be “understanding how to identify the base case” or “writing a report for a computer science course”. Be as concrete as possible.

Collect the challenges in the group and cluster similar ones, e.g. on a blackboard or whiteboard. If there is a cluster that contains both SOLVED and PENDING challenges, team up those that marked the challenge SOLVED with those that marked it PENDING in order to see how their solution can be transferred.

If a cluster contains only PENDING, discuss it in the group and try to find a solution. If this takes too long, split up in smaller groups and work separately until you find a solution (or give up) and communicate it to the other groups. Afterwards, continue with the next challenge.