

Introduction to Programming and Numerical Analysis

Exercise Class 7 Exercise 1

Jonas Theodor Ø. Schmidt

UNIVERSITY OF COPENHAGEN



Today's Program

- 15:15 – 15:25: Intro and tips for the course
- 15:25 – 16:00: Work on Problem Set 0 or install Anaconda, Git and Vscode
- 16:00 – 16:15: Break
- 16:15 – 16:30: Review of the solutions for Problem Set 0
- 16:30 – 17:00: Work on DataCamp

Intro and Tips for the Course

- Course, structure and requirements
 - Weakly lectures with Jeppe or Asker
 - Weakly exercises to get hands-on experience with programming
 - Required to hand-in 3 mandatory assignments which accounts for 40% of the exam
 - Reviewed by your peers and by your TA
- Tips for the course
 - Do the exercises – this is primarily an applied subject
 - Join a group – the mandatory assignments are large
 - Leverage online resources; programming is about understanding concepts, not memorization!

Work on Problem Set 0 or Install Anaconda, Git and Vscode

- I am here to provide assistance with the Problem Set or with installation of Anaconda, Git and Vscode
- Installation guide: <https://sites.google.com/view/numeconcph-introprog/guides>

Tips for Problem Set 0

- In Python, when counting a sequence of integers from 0 to n , the count starts at 0 but stops at $n-1$, not including n itself
- Given that x is a list, $x[-1]$ accesses the last element in the list
- The `break` statement terminates a loop, while the `continue` statement ends the current iteration and proceeds to the next one
- Beware of global variables!
- Computers calculate in binary and use PEMDAS (which may cause overflow)
- $x += 1$ and $x[:] = x + 1$ modifies an array in place, while $x = x + 1$ creates a new array



Break

Review of the solutions for Problem Set 0

- I post my answer key on GitHub at <https://github.com/mcp656/Class-7> following the conclusion of the class

Work on DataCamp

- I am here to provide assistance with DataCamp, clarification of the Problem Set solution or with installation
- Remember, completion of your DataCamp courses is required by February 25th



Questions & comments?