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 solution to 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!

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, i.e., 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

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

Break

Review of the solutions for Problem Set 0

 I post presentation slides and answer keys on GitHub at: https://github.com/mcp656/Class-7

Work on DataCamp

• I am here to provide assistance with DataCamp, clarification of the solution to the Problem Set or to help with installation of Anaconda, Git, and Vscode

 Remember, completion of your DataCamp courses is required by February 25th

