Introduction to Programming and Numerical Analysis

Exercise Class 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!

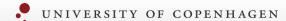
Work on Problem Set 0 or Install Anaconda, Git and Vscode

- 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

