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 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 Problem Set solution or with installation

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

Questions & comments?