## LARSON—MATH 255–HOMEWORK WORKSHEET 08 Programming for Computations (book).

## 1. Log in to CoCalc.

- (a) Start the Chrome browser.
- (b) Go to https://cocalc.com
- (c) Login (your VCU email address is probably your username).
- (d) You should see an existing Project for our class. Click on that.
- (e) Click "New", then "Jupyter Notebook", then call it h08.
- (f) Annotate your work carefully and completely. The more explanation the better!.

The following readings and related work come from Linge & Langtangen's Programming for Computations (2nd ed). The VCU Library has digital access to this book and there is also a pdf in your CoCalc project Handouts folder.

When you are asked what kernel you want to use, choose the  $Python\ 3$  kernel—we'll only use Python for code from the book, and never the extra Sage functions.

## 2. Read Sections 7.1–7.3.

As you read, **run all the code** that you see on your worksheet. Annotate appropriately. In particular I should be able to determine what section/subsection of the book your code snippets came from. Make sure that the code runs—or get help.

3. If you have questions, put your questions in the notes and double-box them so I can easily find them.

If you cut-and-pasted the code and it doesn't execute, you must double-check that the formatting is still the same and that special characters, importantly quotation marks, aren't red.

## Getting your homework recorded

When you are done writing up your nicely annotated code examples...

- (a) Click the Printer-icon button and make a pdf of this worksheet. (If Cocalc hangs, click the *File* button, then Save-and-Download as pdf (via "JupyterLab notebook" is slightly more attractive than than the "Classic" option).
- (b) Send me an email with an informative header like "Math 255—h08 worksheet attached" (so that it will be properly recorded).
- (c) Remember to attach your homework worksheet pdf!