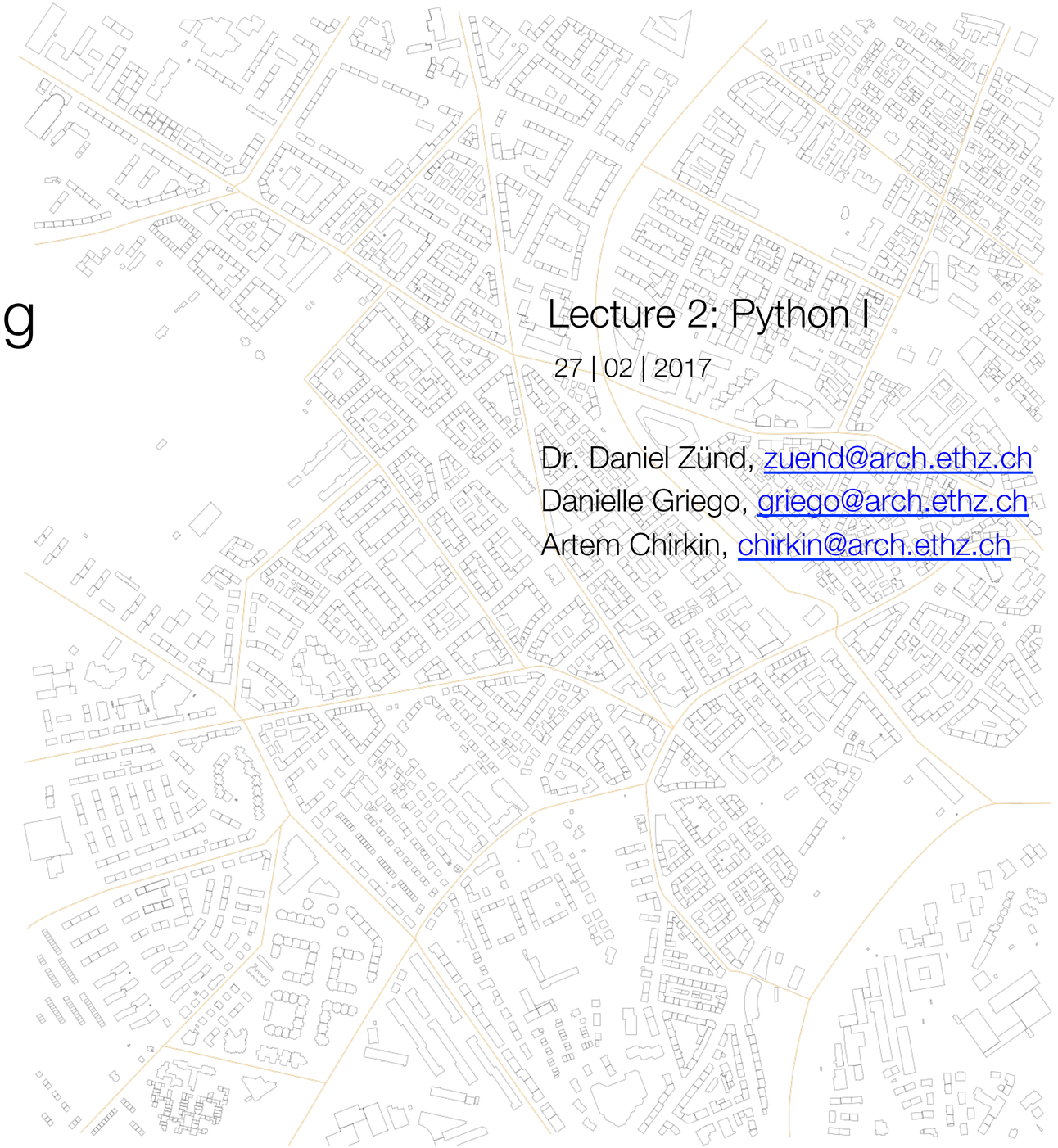
Creative Data Mining

Uncover and evaluate



Lecture 2: Python I

27 | 02 | 2017

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ETH zürich DARCH iA Chair of Information Architecture

What we'll cover today

- Review slides/homework
- Hands-on python tutorial
  - Get familiar with the environment
  - Syntax, loops, data types, conditional statements...
- First programming assignment

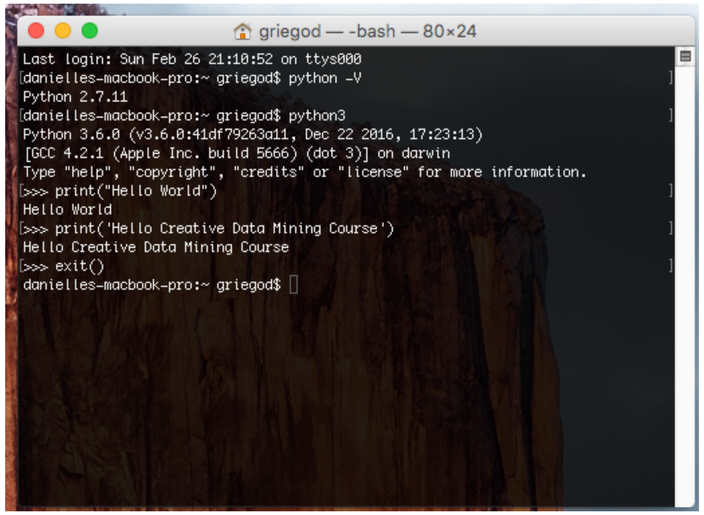
First, did everyone get python and pycharm installed?

1. Install Python from https://www.python.org/downloads/

2. Install PyCharm from https://www.jetbrains.com/pycharm/download/

Python is the programming language

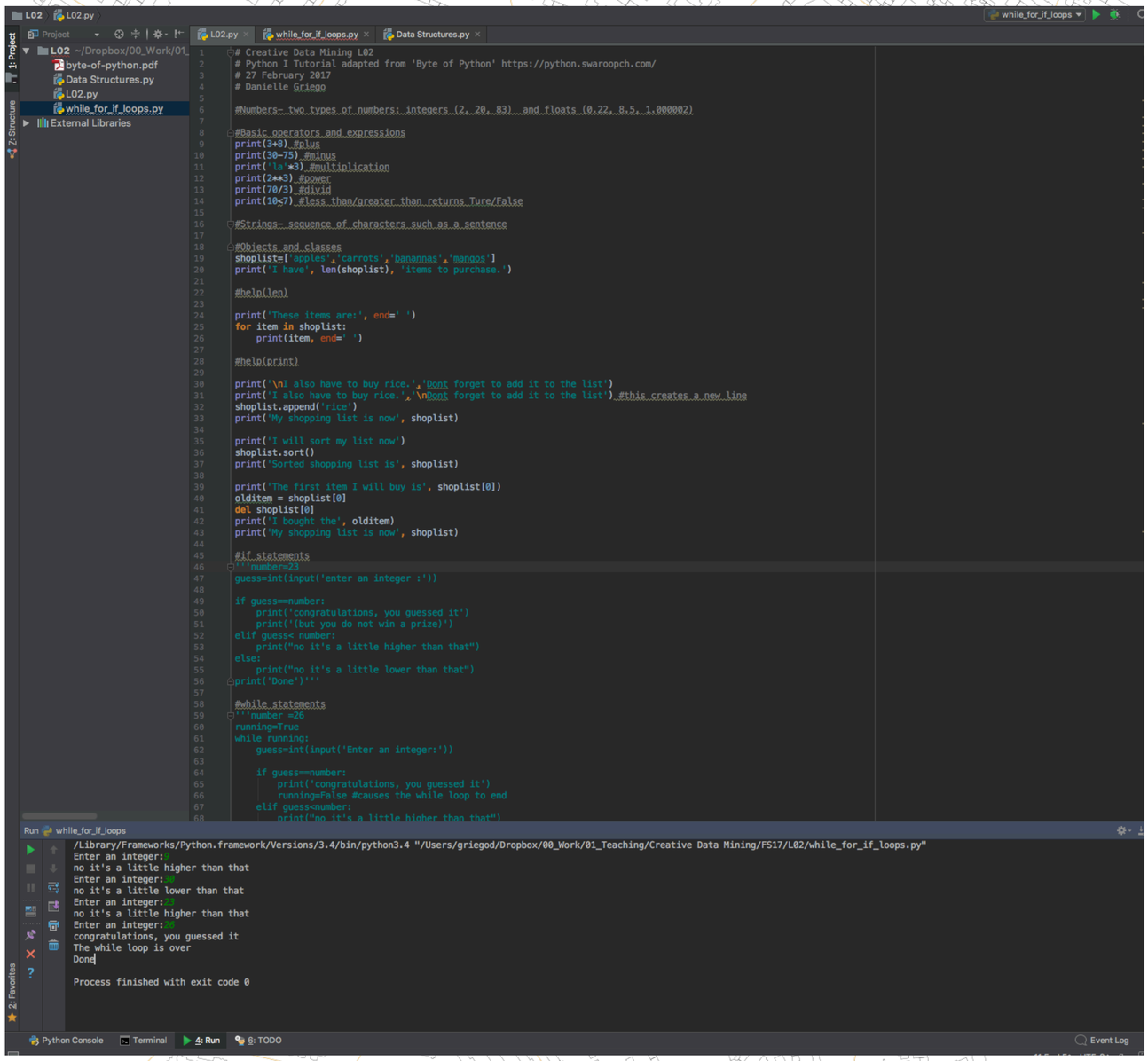
We can simply access it from the command prompt/terminal



Python Interpreter version 2.x or 3.x

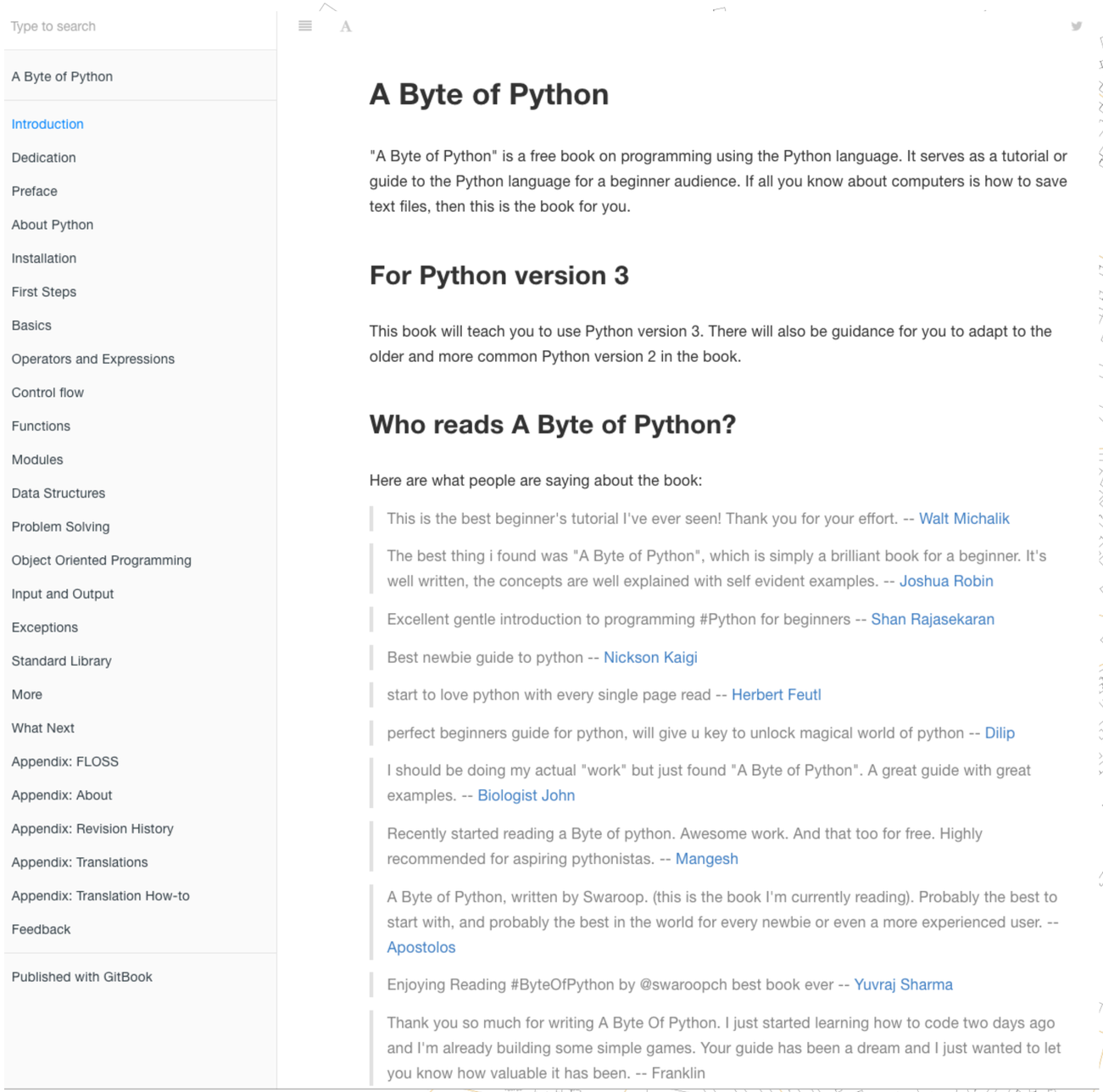
PyCharm is an IDE/Editor

There are many interactive development environments (IDE's), but we will use PyCharm



Hands-on tutorial

Adapted from “A Byte of Python”



https://python.swaroopch.com/

What to expect for next lecture

Functions, libraries, packages, etc.

variables→functions→modules→packages

https://pypi.python.org/pypi

Programming Homework 1

Due March 13th

Exercise 1

Creative Data Mining. Uncover and Evaluate
Chair of Information Architecture
ETH Zürich

February 27, 2017

Hand-In

Please hand in your scripts (*.py* files) latest on March 13th after the lecture to Dani Zünd (`zuend@arch.ethz.ch`).

Loops

Print the following patterns using *for* and/or *while* loops. You should not use more than one *print* statement per exercise.

a)
```
####
####
####
```

b)
```
###
000
###
000
```

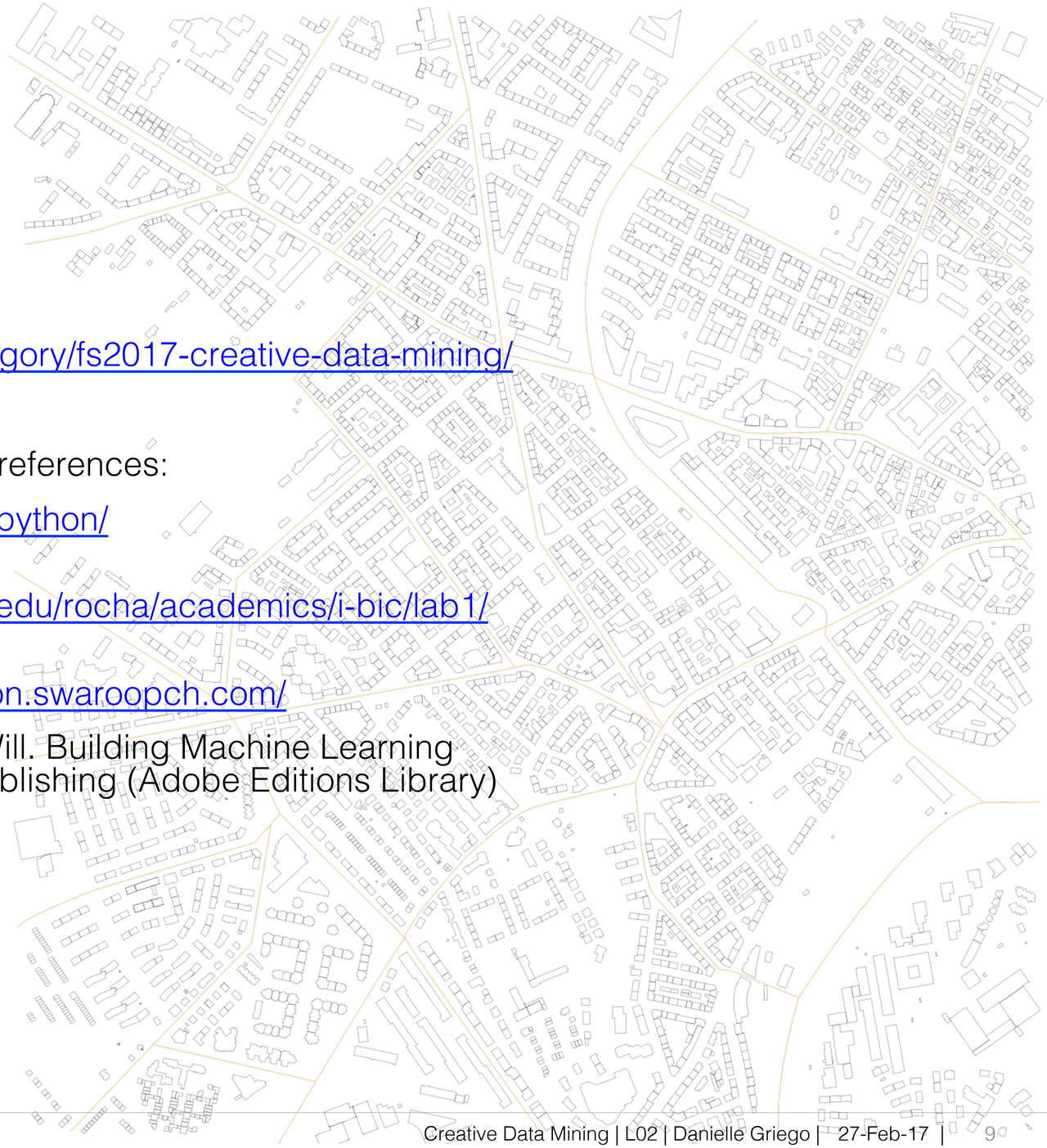
c)
```
#
##
###
####
#####
```

d)
```
#0#0#0#
#0#0#0#
#0#0#0#
```

e)
```
#0#0#0#
0#0#0#0
#0#0#0#
```

f)
```
#
0#
0#0
#0#0
#0#0#
```

Resources for the course



Course Material Posted to:

- http://www.ia.arch.ethz.ch/category/fs2017-creative-data-mining/

A SMALL sample of Tutorials and references:

- https://www.tutorialspoint.com/python/python_basic_operators.htm
- http://www.informatics.indiana.edu/rocha/academics/i-bic/lab1/Python%20review.pdf
- “A Byte of Python” https://python.swaroopch.com/
- Coelho, Luis Pedro; Richard, Will. Building Machine Learning Systems with Python, Packt Publishing (Adobe Editions Library)

Questions?

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