# Course Summary

# Quiz 13

# Our goals

- Understand the basics of Python.

- Learn some business applications of Python.

- Learn how to think like a programmer.

# Key topics

| | Module | Topic | Reading |
|---|---|---|---|
| 1 | Introduction | Overview | Chapter 1 |
| 2 | | Numbers | 2.1 |
| 3 | Core objects | Strings | 2.2 |
| 4 | | Lists and tuples | 2.4 |
| 5 | | Conditions and *if* statements | 3.1, 3.2 |
| 6 | Conditionals and loops | *while* loops | 3.3 |
| 7 | | *for* loops | 3.4 |
| 8 | | Functions I | 4.1 |
| 9 | Functions and program design | Functions II, recursion | 4.2, 4.3, 6.4 |
| 10 | | Object-oriented programming | 7 |
| 11 | | Data processing | 5.1, 5.2 |
| 12 | Data handling | Data visualization | |
| 13 | Summary | Course Summary and Review | |

# Advanced classes

- IS3240 Advanced Python (sample topics: NumPy, Pandas, matplotlib).

- IS4861 Machine Learning for Business.

- Computer science classes

# How to review for the final?

- Go through the in-class examples.

- Hand-written coding for Classwork and Homework questions.

- (Week 12 materials except the part of dictionary will not be tested)

# Technical Interviews

- You may be asked about Python or other computer programming experience for your future job interviews.

- [Preparing for a Python Interview: 10 Things You Should Know](#)
  00:37 Know how to write code on a whiteboard or paper
  01:29 Know basic python control flow
  02:50 Be able to discuss how you've used python
  04:46 Know how to solve common interview problems
  08:42 Know basic python datatypes and when to use them
  11:08 Know how to use list comprehension
  12:39 Know how to use generators
  14:59 Know the basics of OOP
  17:55 Have Python related questions ready to ask your interviewer
  19:46 Know the basics of other technologies

# Some tips from week 1

- Know what you want & Have a plan
  - Plan ahead for interns or graduate schools.

- Classes
  - Don't take (elective) classes for easy GPA.

- Skills
  - Sharpen communication skills.
  - Sharpen analytical skills (e.g. math, programming).
  - Learn some finance (especially if you will work in HK).

- Stay positive.

# A life lesson from Barack Obama

## Be kind and be useful.

# Thank you and good luck!

# Course evaluation

https://onlinesurvey.cityu.edu.hk/tlq/StudentIan/Student