# Introduction to 6.00.2x

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#### Prerequisites

- Experience writing object-oriented programs in Python
  - At least 150 lines
  - Preferably in Python 3.5
- Familiarity with concepts of computational complexity
- Familiarity with some simple algorithms
- ■6.00.1x more than sufficient

6.00.1X LECTURE

#### How Does It Compare to 6.00.1x?

- Programming assignments a bit easier
  - Focus more on the problem to be solved than on programming
- Lecture content more abstract
- Less about learning to program, more about dipping your toe into data science



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#### Why Take 6.00.2x?

- Become a better programmer
- Begin to learn about making productive use of data
  - Statistical thinking
  - Using appropriate packages

## Honing Your Programming Skills

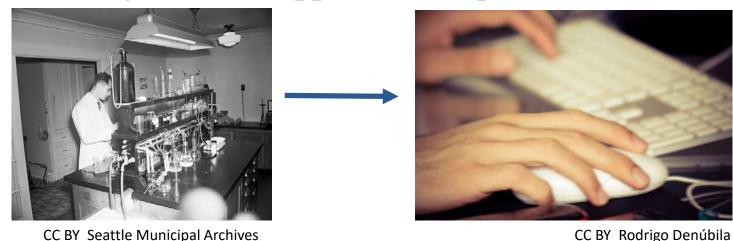
- A few additional bits of Python
- Software engineering
- Using packages
- •How do you get to Carnegie Hall?



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### **Computational Models**

- Using computation to help understand the world in which we live
- Experimental devices that help us to understand something that has happened or to predict the future



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- Optimization models
- Statistical models
- Simulation models

6.00.2X LECTURE

### Some Administrative Things

- Problem sets
  - Programming problems designed to
    - Improve your programming skills
    - Help you learn the conceptual material
- Finger exercises
  - Very small programming problems designed to help you learn a single programming concept
- Reading assignments in textbook
  - Another take on and more details about material covered by lectures and problem sets
- Exams: based on above

