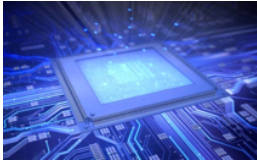
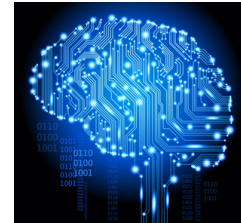


## CSCI 1101B INTRODUCTION TO COMPUTER SCIENCE



Sean Barker  
Bowdoin College



Department of Computer Science

## Bookmark this page!

- Course web page:  
<http://www.bowdoin.edu/~sbarker/1101>

## Personnel and Resources

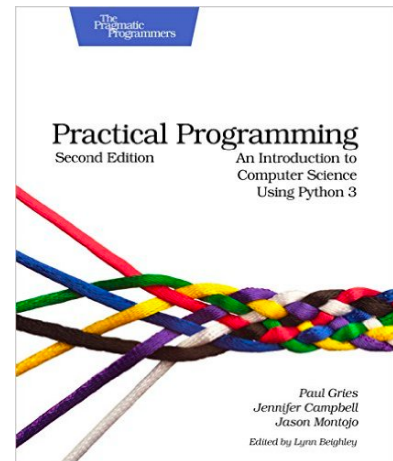
- Instructor (Section B): Sean Barker
- Email: [sbarker@bowdoin.edu](mailto:sbarker@bowdoin.edu)
- Office: Searles 220
- Interests: smart buildings, distributed systems
  
- Other instructors: Eric Chown, Clare Bates Congdon
  
- TA battalion
  
- Piazza Q&A forum

## Course Requirements

- Lab assignments (weekly)
  
- Projects (~4)
  
- Exams (3)

## Other Administrivia

- Class/lab meeting times
- Textbook
- Electronic device policy
- Collaboration policy and honor code



## First question...

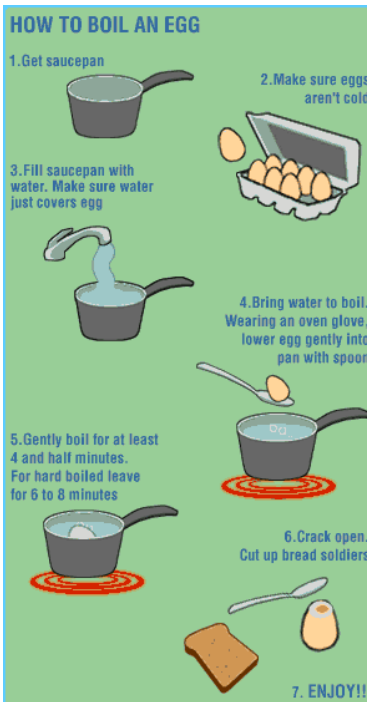
### What is computer science?

- "Computer science is no more about computers than astronomy is about telescopes, biology is about microscopes or chemistry is about beakers and test tubes. Science is not about tools, it is about how we use them and what we find out when we do."  
– Michael Fellows & Ian Parberry

# Algorithms!

<b>Divide:</b>	
<b>Multiply:</b>	
<b>Subtract:</b>	
<b>Bring Down:</b>	
<b>Repeat:</b>	

# Cooking an Egg



# An Example Algorithm

- Input: two whole numbers
- 1. Name the larger number **X**, smaller number **Y**.
- 2. Divide **X** by **Y** and name the remainder **R**.
- 3. If **R** is *not* 0, then:
  - Change **X** to be the current value of **Y**,
  - Change **Y** to be the current value of **R**,
  - Go back to step 2.
- 4. Otherwise, output **Y**.

Input	Output
2, 5	1
9, 15	3
10, 5	5
8, 14	2
15, 4	1

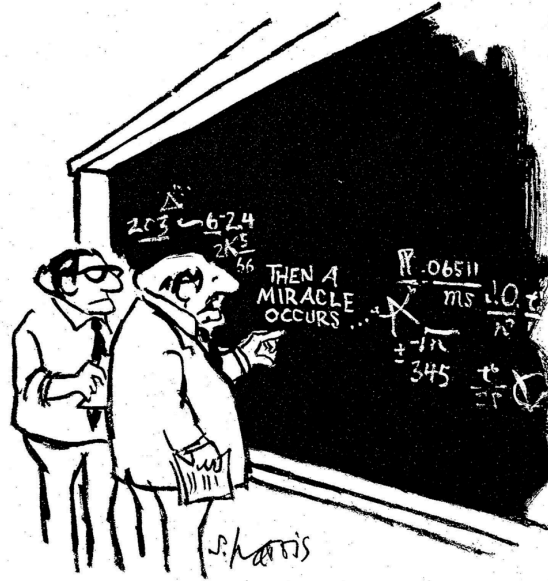
# Why Learn to Program?

Everybody in this country should  
learn to program a computer...  
because it teaches you how to think

Steve Jobs, co-founder and CEO of Apple Inc. (1955 - 2011)



# Being Explicit



"I THINK YOU SHOULD BE MORE EXPLICIT HERE IN STEP TWO."

# Programming Languages

