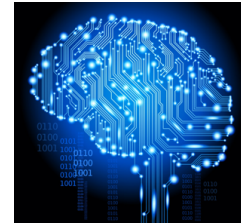**Bowdoin**

CSCI 1101B
INTRODUCTION TO
COMPUTER SCIENCE

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Department of Computer Science

Logistics and Organizational Info

- Instructor: Sean Barker
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- Course web page:
  http://www.bowdoin.edu/~sbarker/1101

- Questions about dates, times, policies, etc...
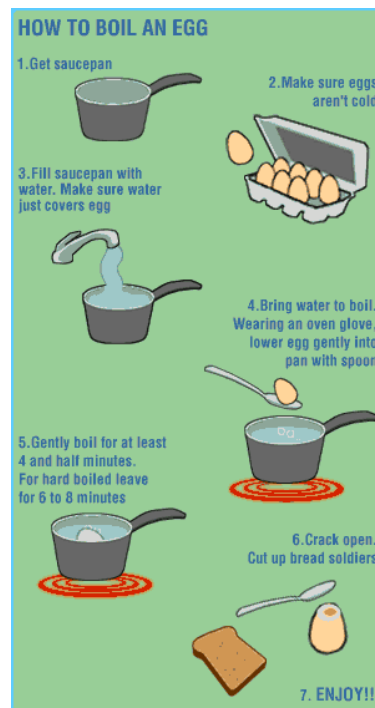 - Check the website first!

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!

Cooking an Egg

HOW TO BOIL AN EGG

1. Get saucepan
2. Make sure eggs aren't cold
3. Fill saucepan with water. Make sure water just covers egg
4. Bring water to boil. Wearing an oven glove, lower egg gently into pan with spoon
5. Gently boil for at least 4 and half minutes. For hard boiled leave for 6 to 8 minutes
6. Crack open. Cut up bread soldiers
7. ENJOY!!

An Example Algorithm

- Input: two whole numbers

- 1. Call the larger number **X**, smaller number **Y**.

- 2. Divide **X** by **Y** and call 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**,
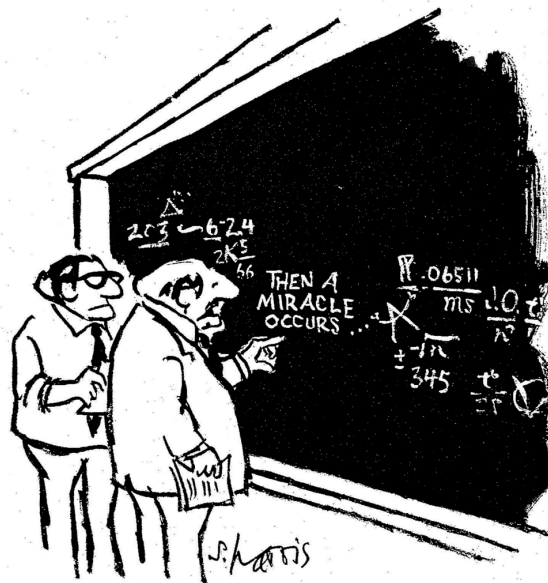 - Go back to step 2.

- 4. Output **Y**.

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