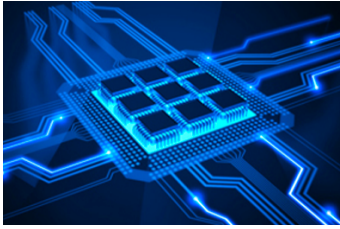
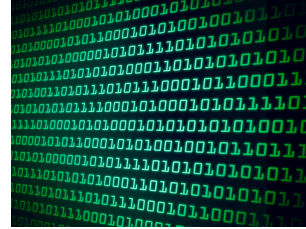


## CSCI 2330 FOUNDATIONS OF COMPUTER SYSTEMS



Sean Barker  
Bowdoin College

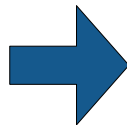


Department of Computer Science

## The Big Question

How does a program work?

```
/**  
 * Simple HelloButton() method.  
 * @version 1.0  
 * @author john doe <doe.j@example.com>  
 */  
HelloButton()  
{  
  JButton hello = new JButton( "Hello, wor  
  hello.addActionListener( new HelloBtnList  
  
  // use the JFrame type until support for t  
  // new component is finished  
  JFrame frame = new JFrame( "Hello Button"  
  Container pane = frame.getContentPane();  
  pane.add( hello );  
  frame.pack();  
  frame.show();          // display the fra  
}
```



# Abstraction

Abstractions are great...



But they leak!

# Personnel and Resources

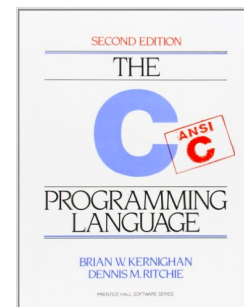
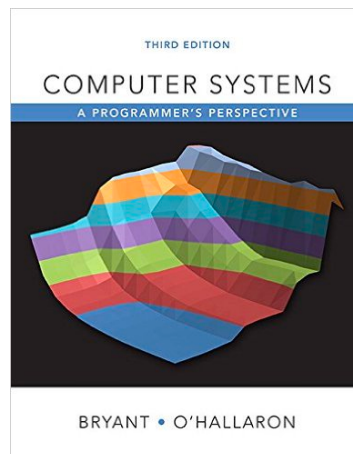
- Instructor: Sean Barker
- Email: [sbarker@bowdoin.edu](mailto:sbarker@bowdoin.edu)
- Office: Searles 220
- Research: smart buildings, distributed systems
  
- TAs: Bo Bleckel, Bolor Jagdagdorj
  
- Piazza Q&A forum

# Course Components

- Labs (~6)
- Exams (2)
- In-class participation
- Expectations

# Other Administrivia

- Class meeting times
- Textbooks
- Collaboration policy and honor code



# Go here!

- Course web page:  
<http://www.bowdoin.edu/~sbarker/2330>

# Lab 0: Unix Warmup

```
Terminal — /home/sbarker — ssh sbarker.bowdoin.edu — 80x34
sbarker@sbarker$ ssh dover
sbarker@dover's password:
Last login: Tue Jan 26 06:18:46 2016 from sbarker.bowdoin.edu

+-----+
|                       |
| Welcome to Bowdoin College |
|                       |
+-----+
| For information about our Linux environment, please visit |
|                               http://hpc.bowdoin.edu/       |
+-----+

*****
*****

Please be mindful that this machine is a shared resource. If you need
to run very intensive computational programs, please consider running
them on the HPC Grid instead. For more info, please peek at:
http://hpc.bowdoin.edu/

Thank you!
sbarker@dover$ █
```

# System Layers

```
#include <stdio.h>

int main() {

    printf("Hello, World!\n");

    return 0;
}
```