

Where to Go from Here

# Announcements

- FacePamphlet due Tuesday at 8:30AM.
  - ***No late submissions*** - sorry, this is university policy.
- Midterms available for pickup; regrades can be submitted until next Tuesday at 8:30AM.
- ***Please evaluate this course on Axxess - your feedback really does make a difference!***

# Packaging Your Programs

Packaging Your Programs

-or-

How I Learned to Quit  
Worrying and Love the JAR

# JAR Files



- A **JAR file** (Java **AR**chive) is a packaged set of Java files.
- You can share your programs with others by creating a JAR file for your programs.

# Putting Your Programs in JARs

- You can create a JAR file for your programs as follows.
- First, add a `main` method to your program that looks like this:

```
public static void main(String[] args) {  
    new ClassName().start(args);  
}
```
- This `main` method will start up the program when you run it.

Step one: Add the main method.

Step two: ???

Step three: Profit!

That Middle Step



Beyond CS106A



# Where We've Been

- Variables
- Methods
- Loops
- Statements
- Graphics
- Strings
- Classes
- Files
- Arrays
- ArrayList
- HashMap
- Collections
- Images
- Interactors
- Graphs
- Networking

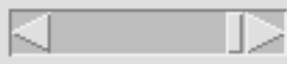
File

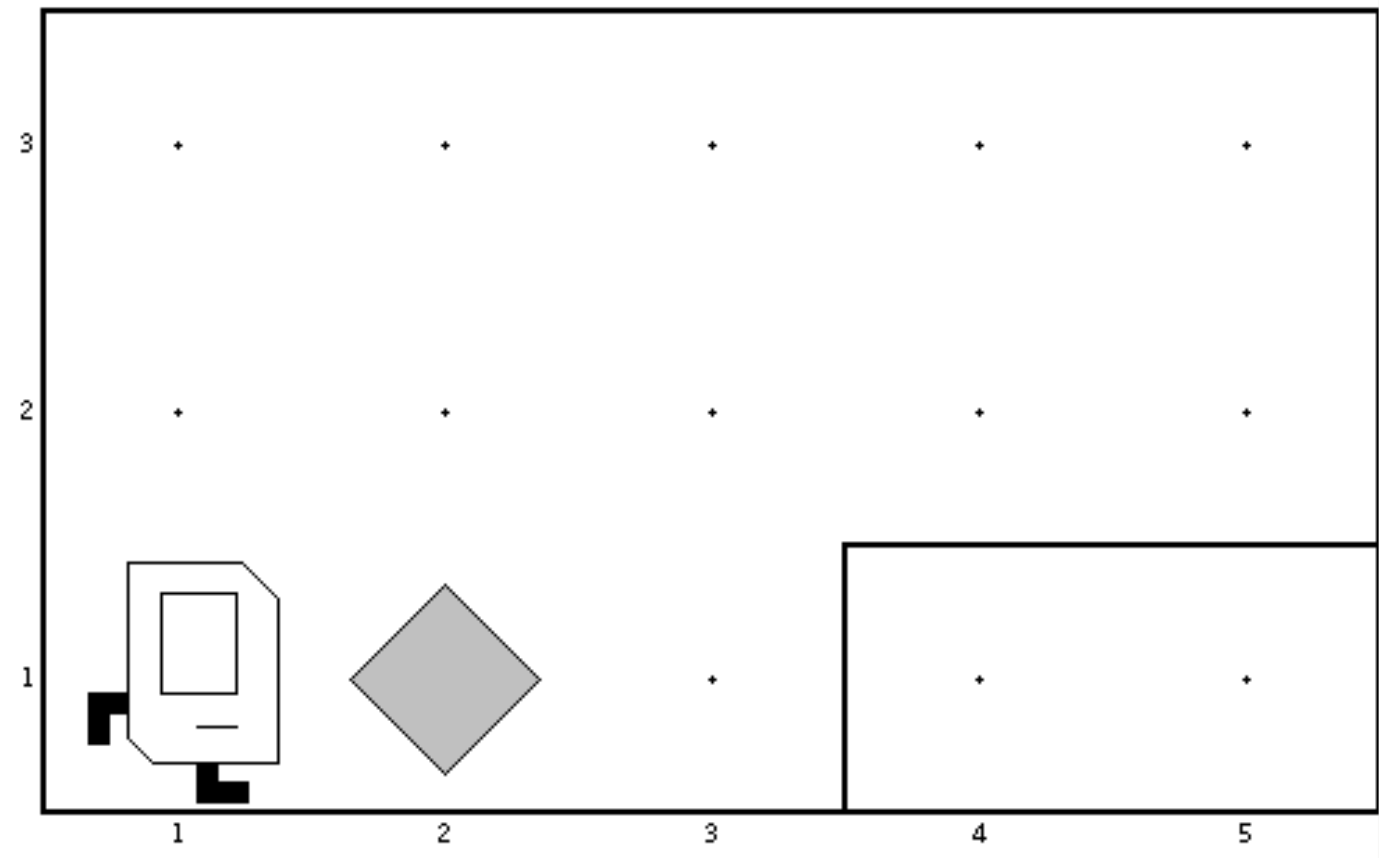
Start Program

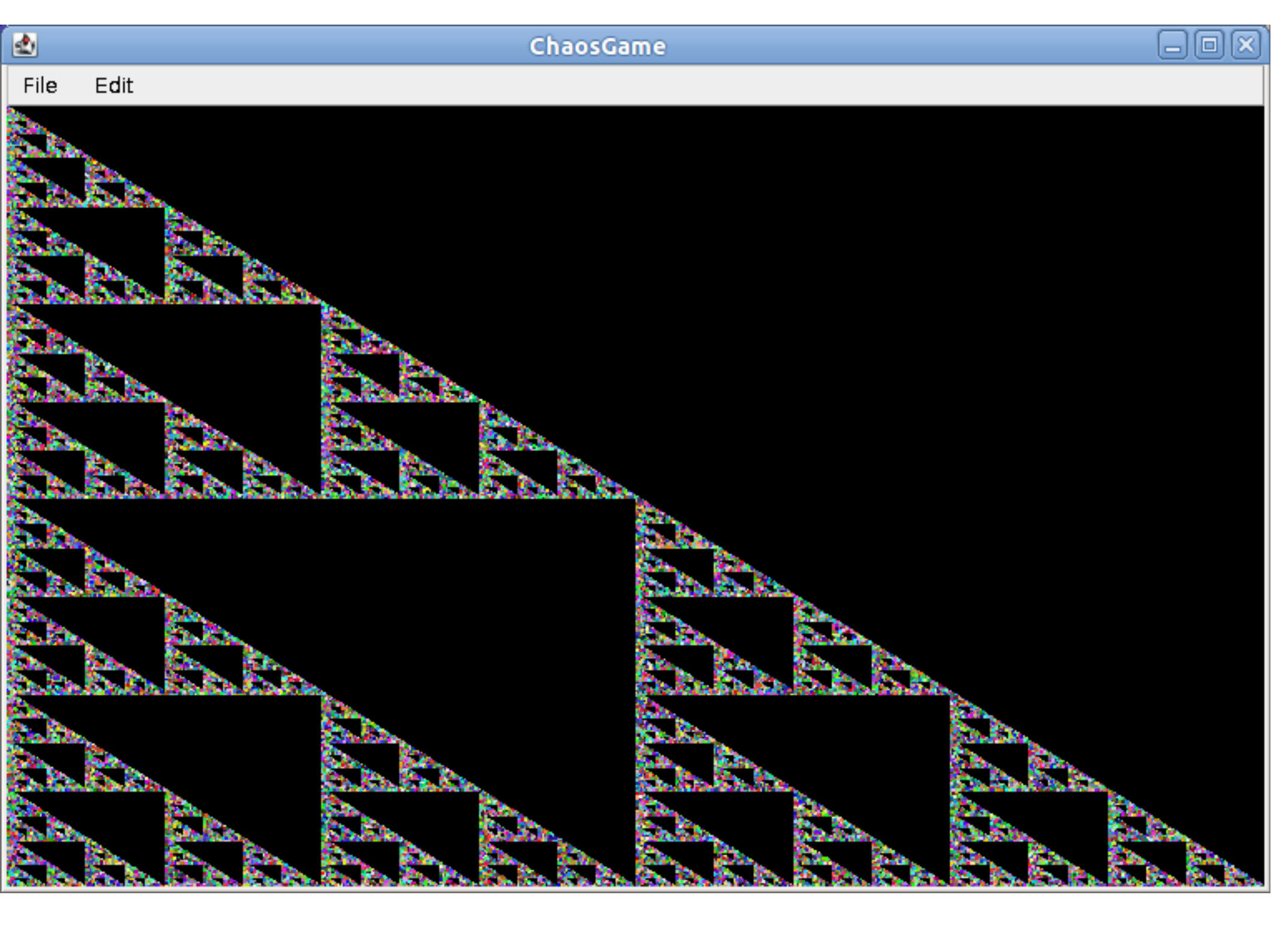
Load World

New World

Edit World

Slow  Fast





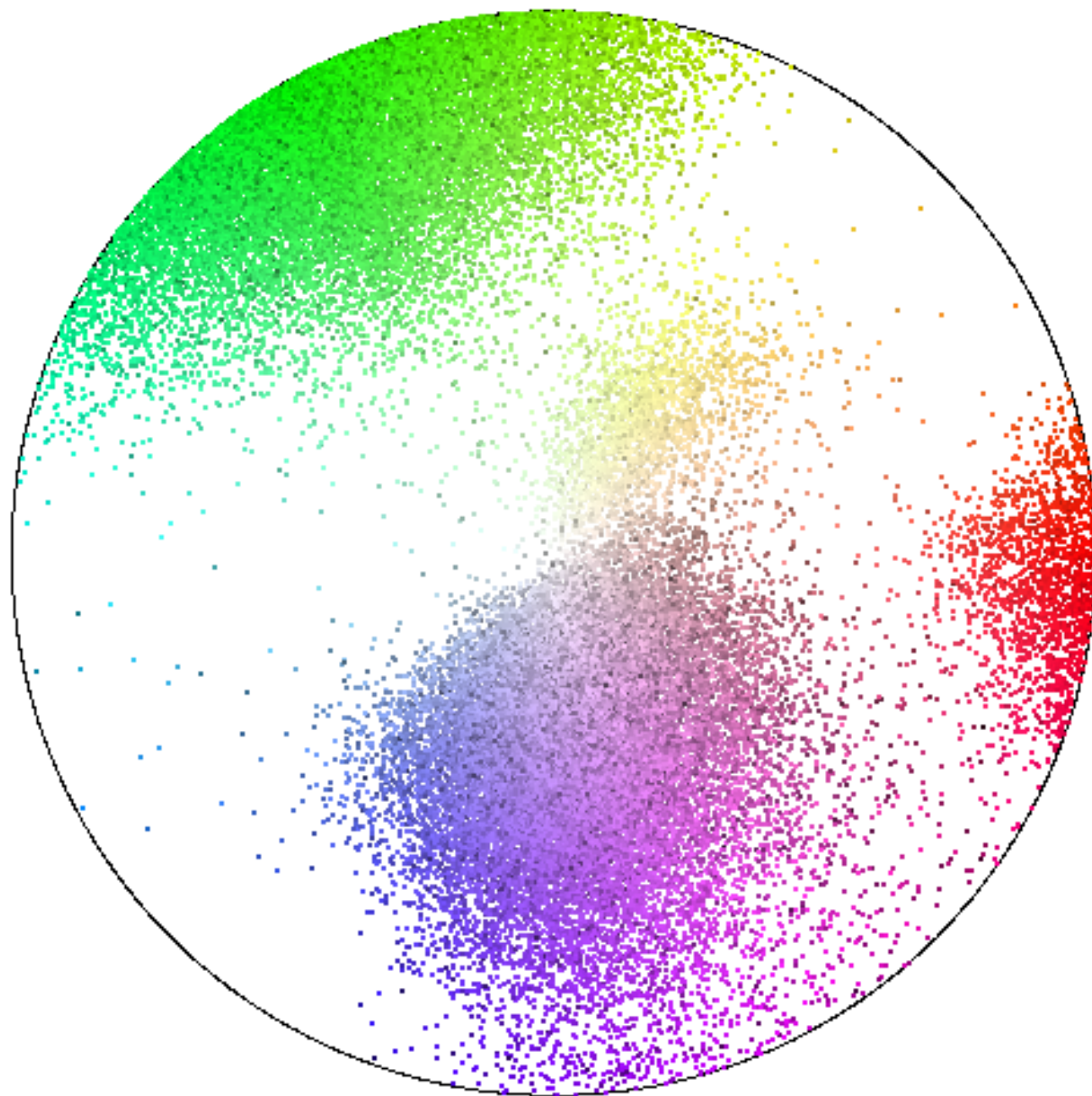




XKCDColors



File



Clear

Enter color:

Bright Green

Graph

**Read 1097670 articles.**

**Read 32486853 links.**

**1: United States**

**2: United Kingdom**

**3: France**

**4: England**

**5: Canada**

**6: World War II**

**7: English language**

**8: Germany**

**9: Australia**

**10: India**

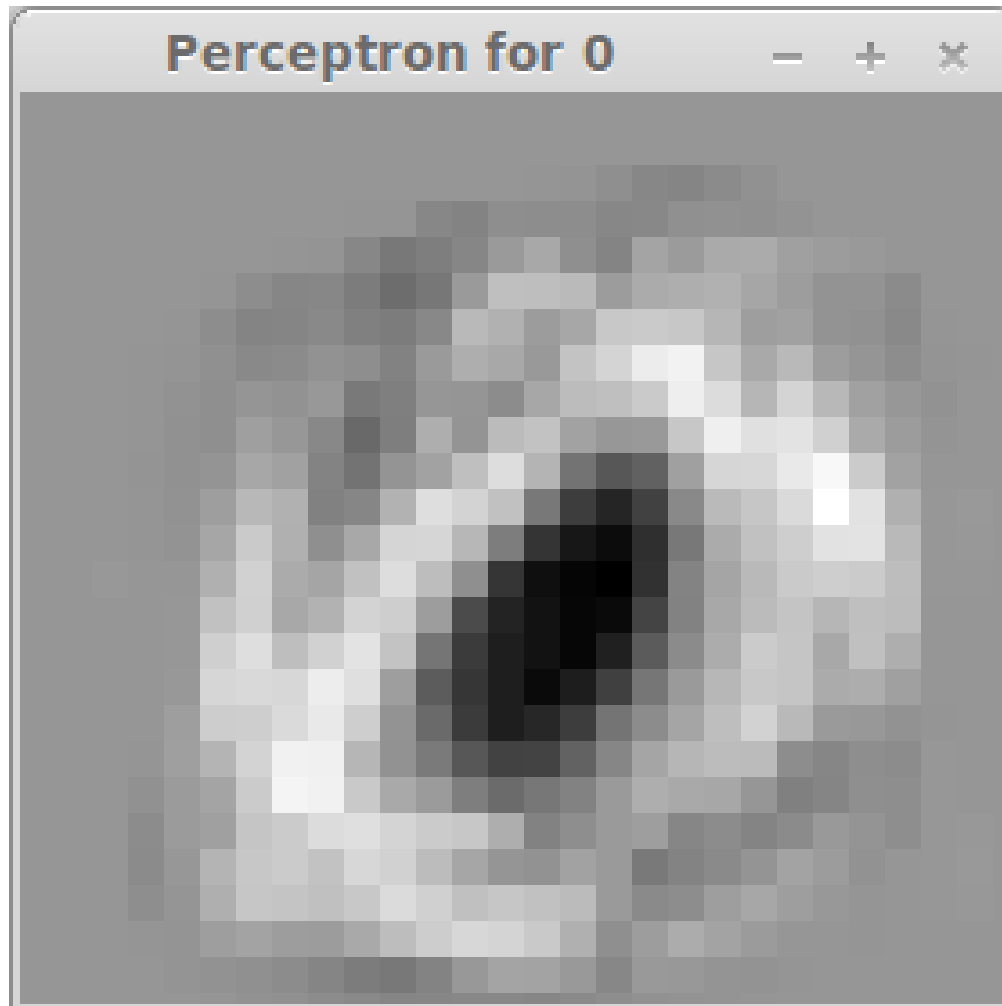
**11: London**

**12: Italy**

**13: China**

**14: Latin**





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# Where We've Been

Variables

Arrays

Methods

ArrayList

Loops

HashMap

Statements

Collections

Graphics

Images

Strings

Interactors

Classes

Graphs

Files

Networking

# Where We've Been

- ***Learn how to harness computing power to solve problems.***
- To that end:
  - Explore fundamental techniques in computer programming.
  - Develop good software engineering techniques.
  - Gain familiarity with the Java programming language.

# Where We're Going: CS106B

- ***Learn to model and solve larger and more complex problems.***
- To that end:
  - Explore how to solve a broader and more impressive array of problems.
  - Learn new abstractions for modeling complex problems.
  - Understand algorithmic efficiency and how design decisions influence program runtime.

# Another Option: CS106X

- “Honors” version of CS106B.
- Covers all of the CS106B material, plus some extra additional topics.
- Not offered next quarter; usually offered Fall/Winter.

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 and Ian Parberry,  
“SIGACT trying to get children excited about CS”

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# Who's Here Today?

- Aeronautical and Astronautical Engineering
- Anthropology
- Applied Physics
- Art History
- Art Practice
- Bioengineering
- Biology
- Biomedical Informatics
- Business Administration
- Cancer Biology
- Chemical and Systems Biology
- Chemical Engineering
- Chemistry
- Chinese
- Civil and Environmental Engineering
- Classics
- Communication
- Comparative Literature
- Comparative Studies in Race and Ethnicity
- Computational and Mathematical Engineering
- Creative Writing
- Earth Systems
- East Asian Studies
- Economics
- Education
- Electrical Engineering
- Energy Resources Engineering
- English
- Epidemiology
- Genetics
- Geological and Environmental Sciences
- Human Biology
- Immunology
- International Policy Studies
- International Relations
- Italian
- Japanese
- Latin American Studies
- Law
- Management
- Management Science and Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Medicine
- Music
- Petroleum Engineering
- Philosophy and Religious Studies
- Political Science
- Product Design
- Psychology
- Public Policy
- Science, Technology, and Society
- Sociology
- Spanish
- Statistics
- **Undeclared!**

You're ready to take on big,  
important challenges with the  
skills you've just learned.

Best of luck wherever they take you!