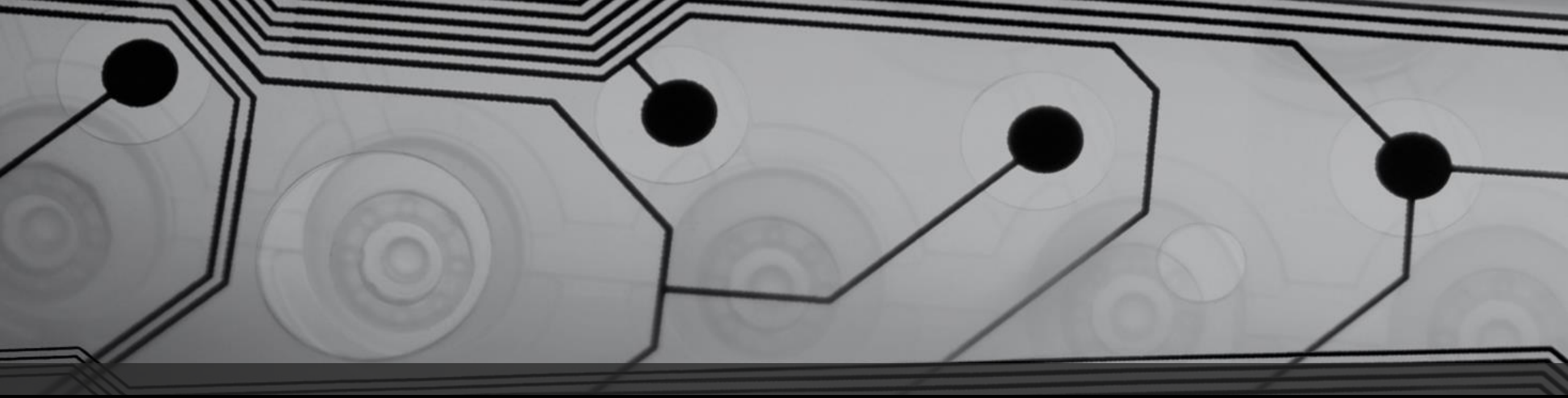


CMSC 131

Fall 2018

Announcements

- First project (Hello World) has been posted. If you're stuck, come to office hours
- No classes Monday (Labor Day)
- Lab session on Tuesday is "extended office hours".
- Slides are being posted on class web page ("Schedule")

Programming Languages

- What is “Machine Language”?

  Example:

  `10000011 10100000 01100100`

  “Add the value 100 to register EAX”

- What is “Assembly Language”?

  `Example:`

  `ADD EAX, 100`

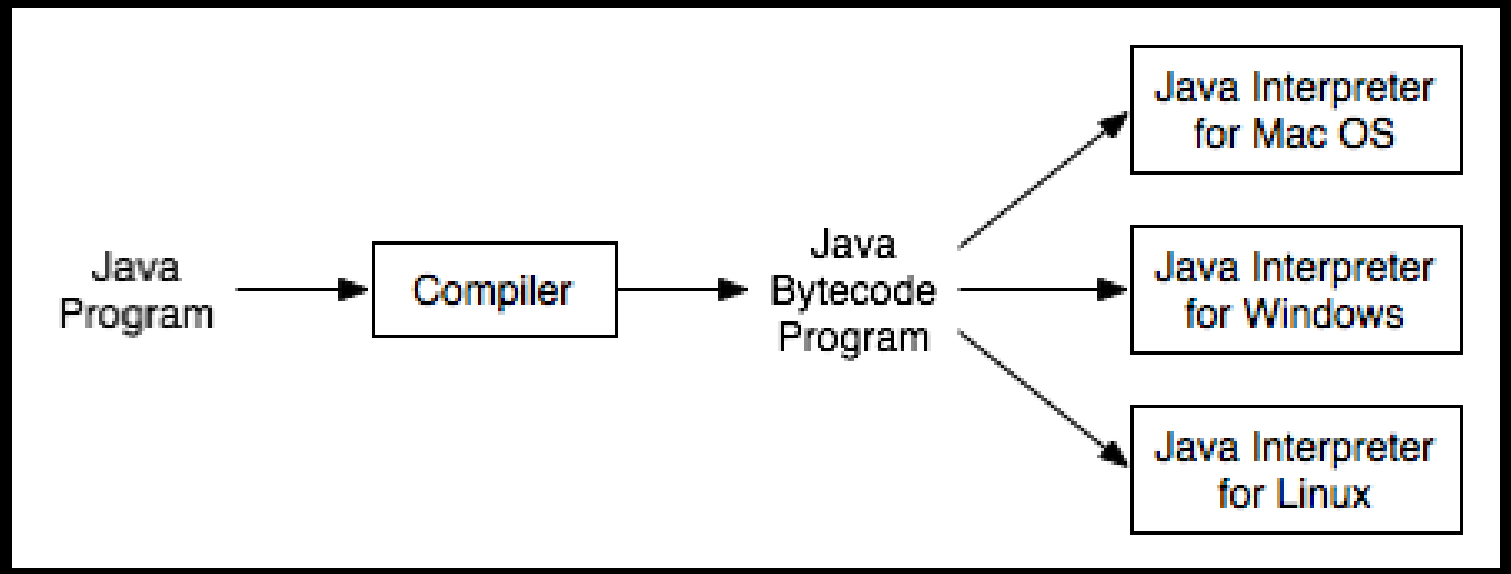
Continue: Higher Level Languages

Some “historically interesting” languages:

- Fortran
- Cobol
- Lisp
- Pascal
- C
- C++
- Java
- Python
- Ruby

Translating High Level Code to Machine Code

- Compiler
- Interpreter
- How does Java do it?



Why Java for CMSC131?

- Popularity in industry
- Designed for “Object Oriented” approach
- Portable
- Extensive and modern libraries
- Good for beginners
  - Static typing
  - garbage collection
  - Not too many “sharp edges”

Preliminary Remarks

- All coding examples will be posted to your CVS repository
- Initial examples are “procedurally oriented” not “object oriented”
- We’re going to start very slowly!
- We will have to leave out some details at first.
- Don’t be afraid to try “experiments” on your own!

Vague Definitions (for now…)

First, let's loosely define these terms:

- Object
- Class
- Method
  - Main method
- Statements