

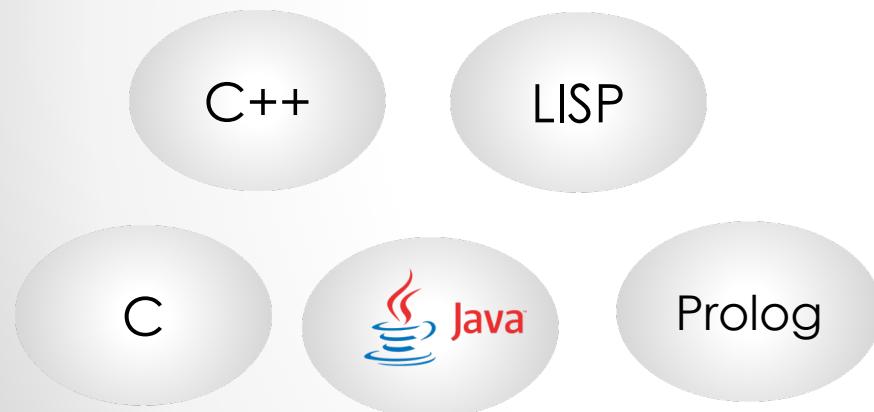
CSE240 – Introduction to Programming Languages (online)

Lecture 01:
Course Presentation

Javier Gonzalez-Sanchez

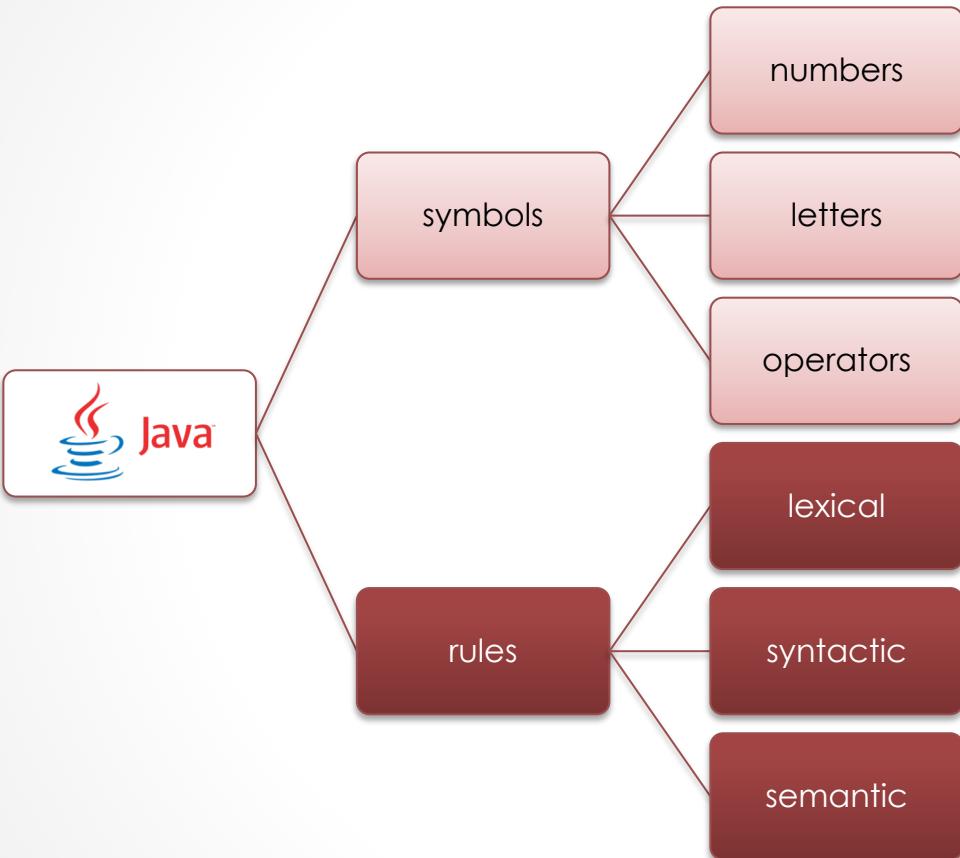
javiergs@asu.edu
javiergs.engineering.asu.edu
Office Hours: By appointment

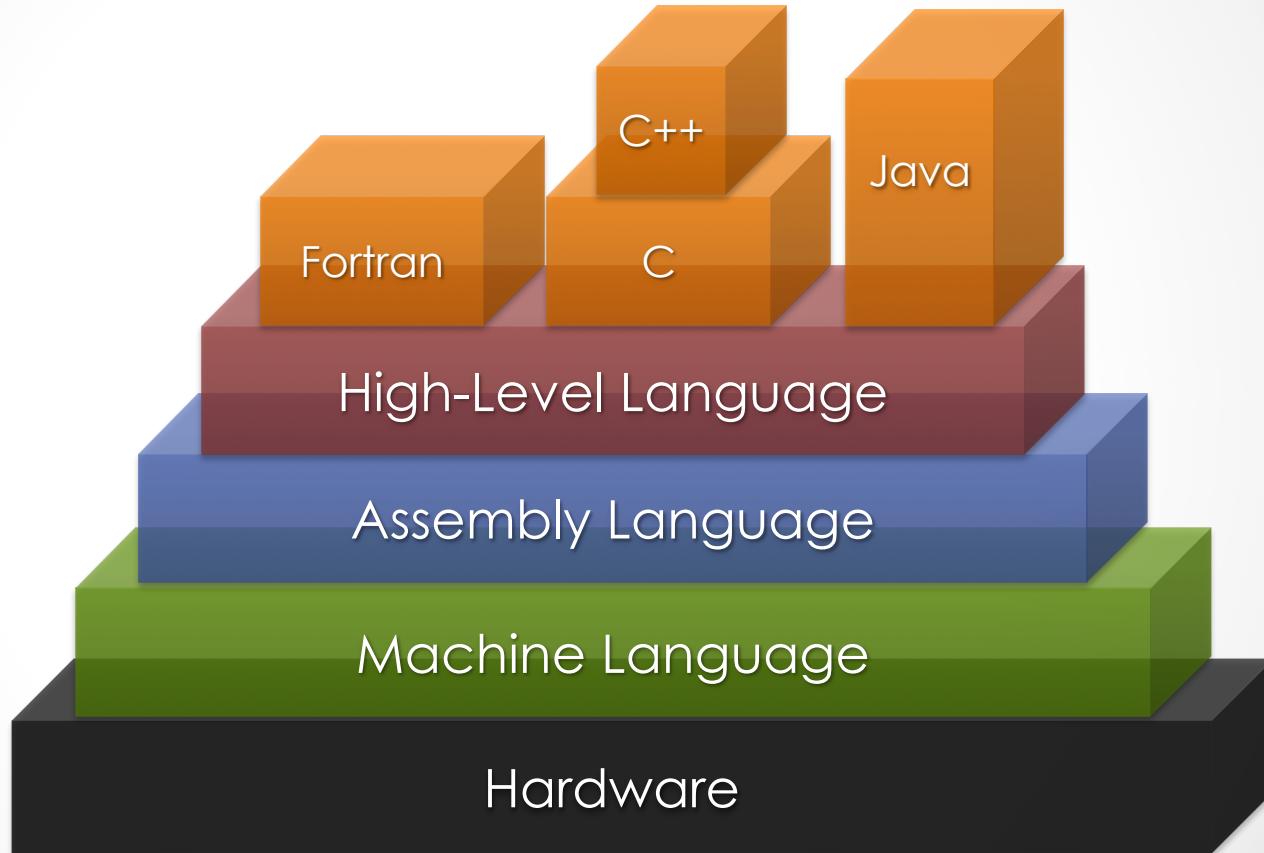
CSE240 – Introduction to Programming Languages



A set of symbols
structured by a set of rules

Goal: Tell a computer what to do



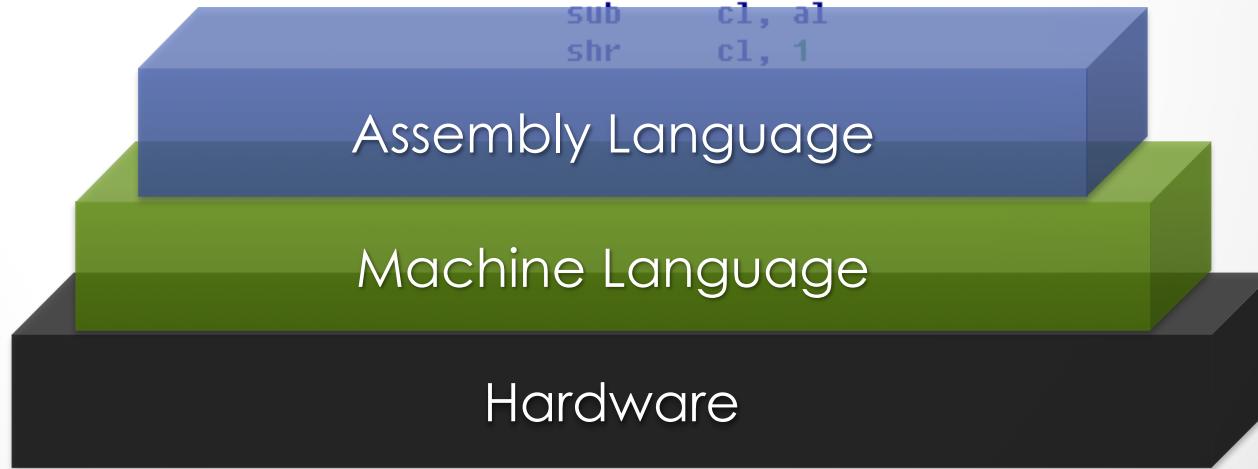


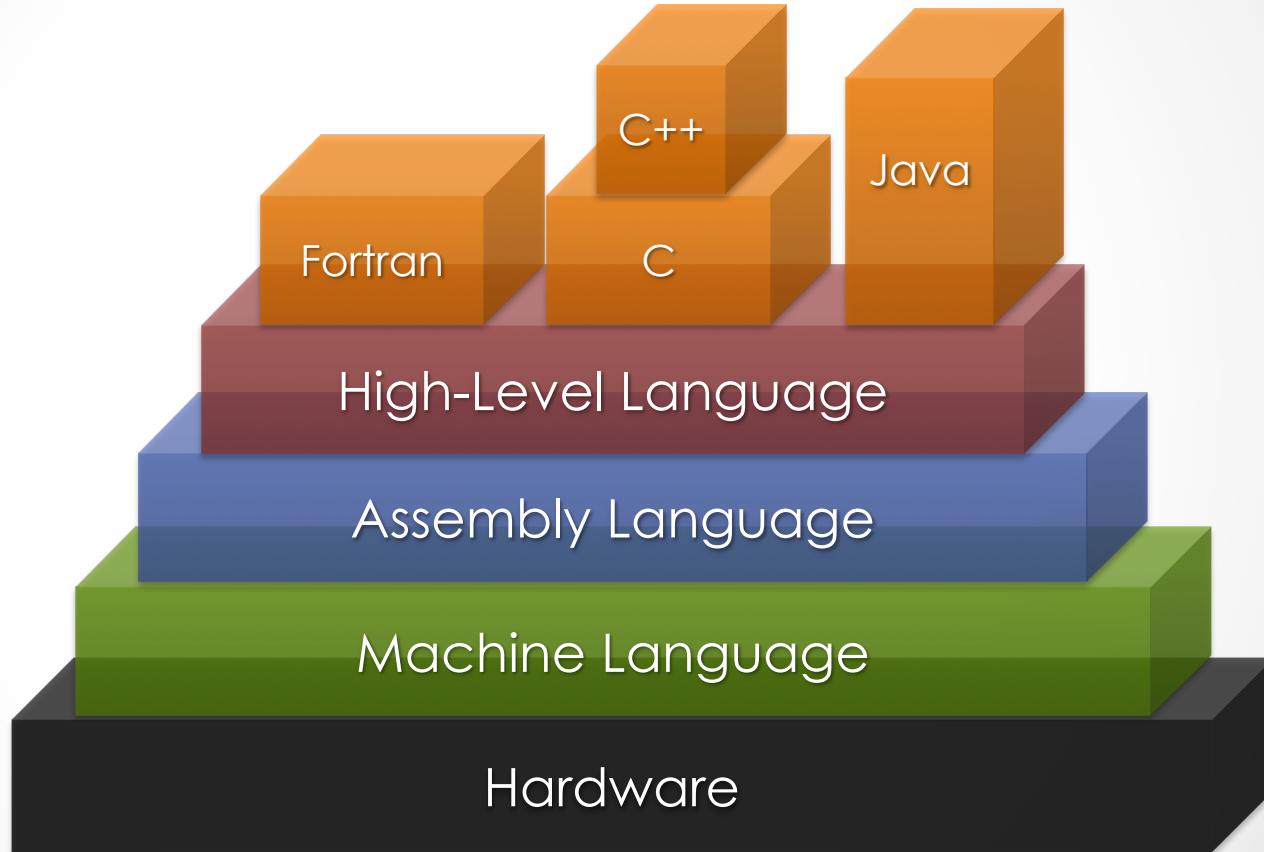


Machine Language

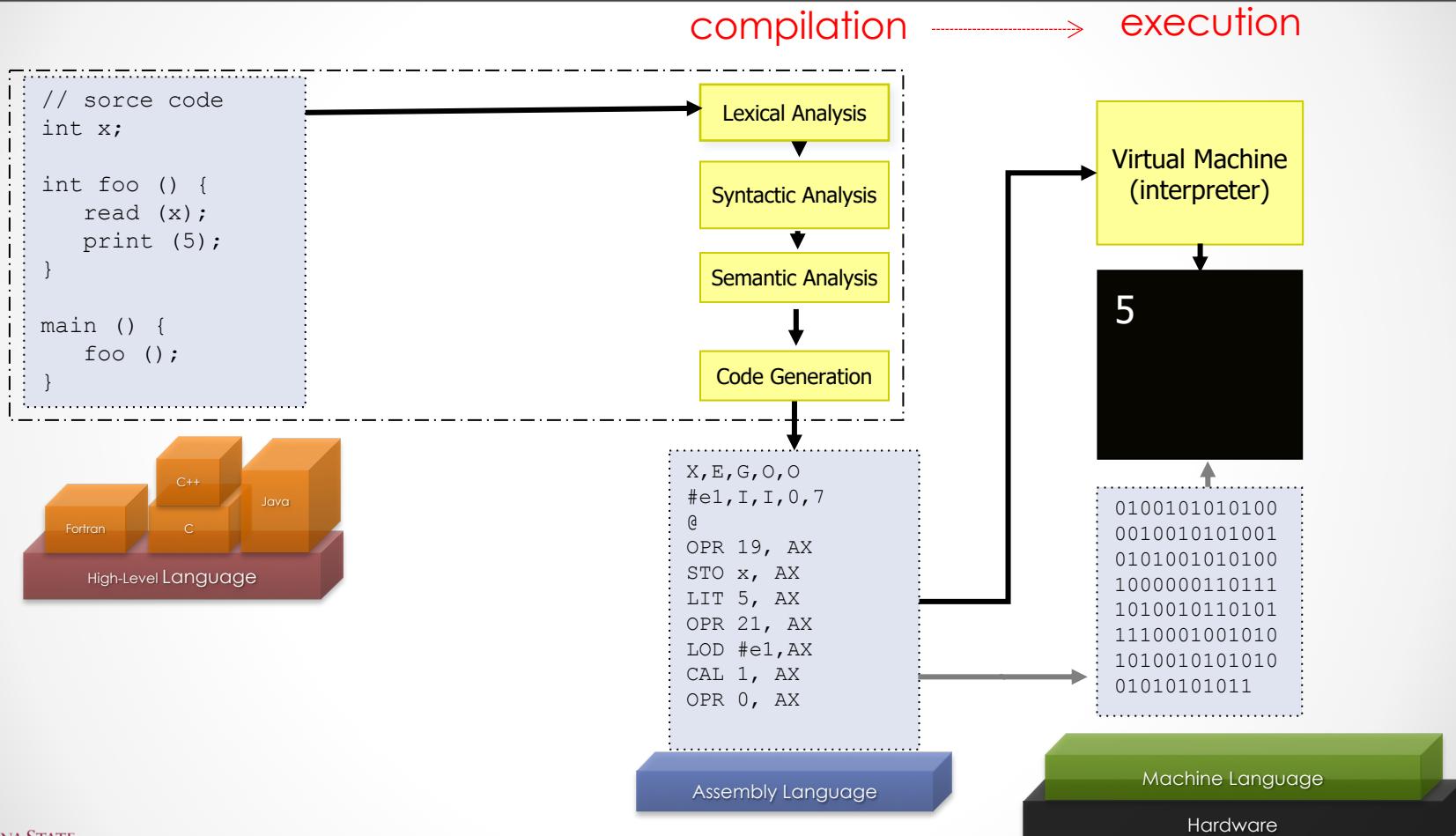
Hardware

```
push    ebp  
mov     ebp, esp  
movzx  ecx, [ebp+arg_0]  
pop    ebp  
movzx  dx, cl  
lea    eax, [edx+edx]  
add    eax, edx  
shl    eax, 2  
add    eax, edx  
shr    eax, 8  
sub    cl, al  
shr    cl, 1
```





High-Level Languages



Procedural

C

program = algorithms + data

Object-Oriented

Java, C++

program = objects + messages

Functional

LISP

program = functions ° functions

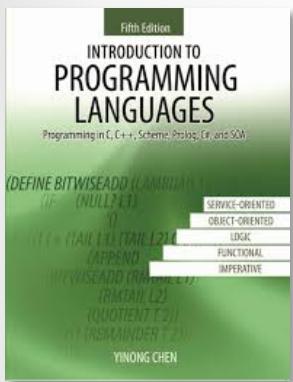
Logic Programming

Prolog

program = facts + rules

High-Level Language

Main Topics	
1	Introduction
2	Principles of Programming Languages
3	Language C
4	Language C++
5	Working with C/C++
6	Language Lisp
7	Language Prolog
8	Final review



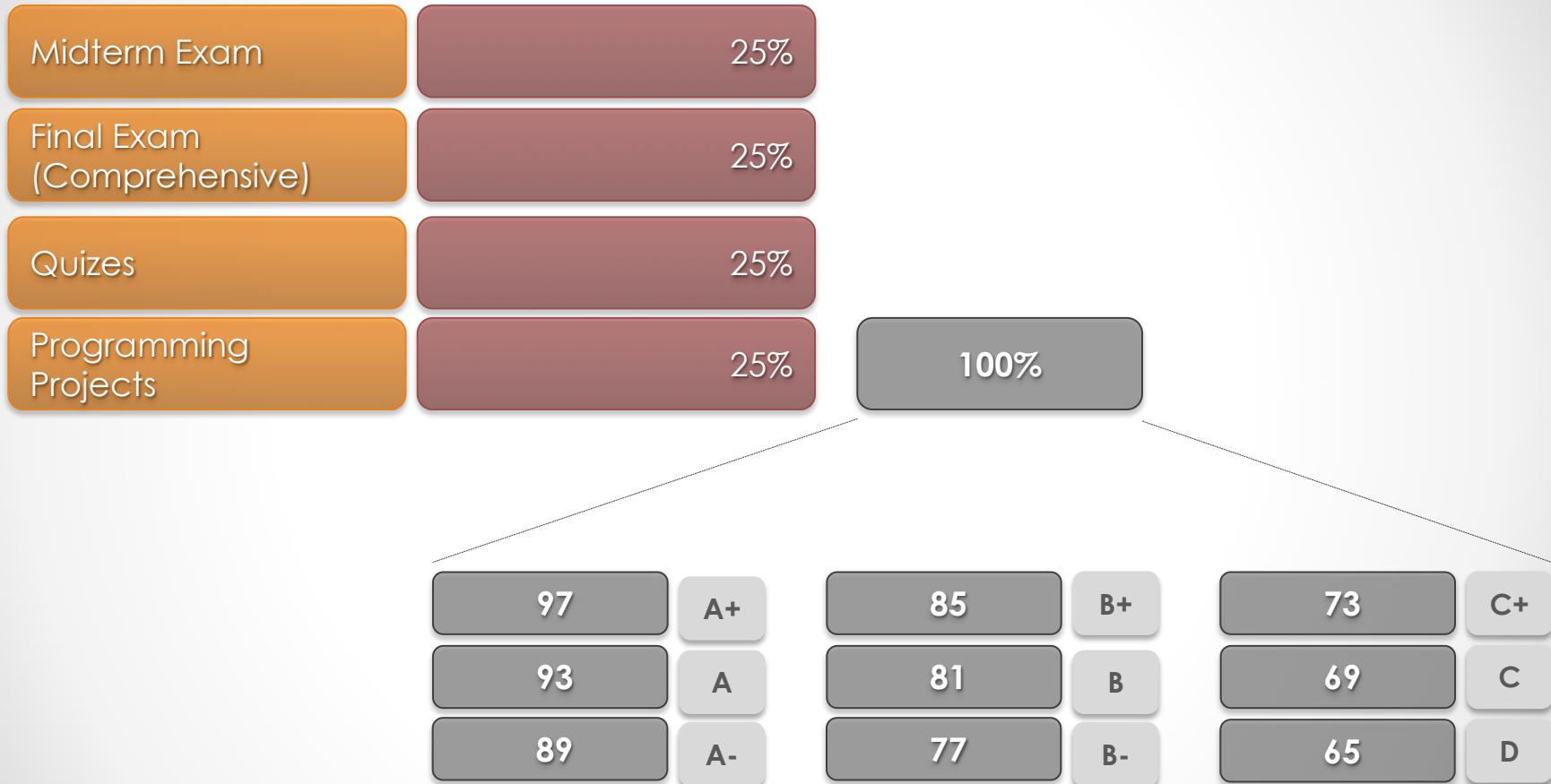
Chapter 1. Principles

Chapter 2. Structural programming

Chapter 3. Object-Oriented programming

Chapter 4. Functional programming

Chapter 5. Logic programming





CSE240 – Introduction to Programming Languages (online)

Javier Gonzalez-Sanchez

javiergs@asu.edu

Fall 2017

Disclaimer. These slides can only be used as study material for the class CSE240 at ASU. They cannot be distributed or used for another purpose.