Y86 Introduction

- Topics
  - Putting it all together in a program
- Learning Objectives
  - Use the simulator to execute y86 programs

Much of this material is derived from that of Bryant and O'Halloran.

Example Program (1)

```
# Initialize registers
1. irmovq        0xFACE, %rax
2. irmovq        0xCAFE, %rbx

# Swap values
3. rrmovq        %rax, %rcx
4. rrmovq        %rbx, %rax
5. rrmovq        %rcx, %rbx

6. halt
```

Example Program (2)

```
# Load data from memory
1. irmovq a, %r11
2. mrmovq 0(%r11), %rax
3. mrmovq 8(%r11), %rbx


# Write values back to
# opposite locations
4. rmmovq %rax, 8(%r11)
5. rmmovq %rbx, 0(%r11)

6. halt
7. .pos 0x100
8. a: .quad 0xFACE
9. b: .quad 0xCAFE
```