

# **16.317: Microprocessor Systems Design I**

Spring 2014

Lecture 26: Key Questions

April 9, 2014

1. Describe how to write PIC code to implement operations that deal with two registers (e.g. moving the contents of one register to another; adding two registers).
2. Describe how to implement conditional jumps.

3. Describe how to implement simple rotate operations and multi-bit shift/rotate operations.

4. Translate these x86 operations to PIC code. Assume that there are registers defined for each x86 register (e.g. AL, AH, BL, BH, etc.)

- OR AL, BL
  
  
  
  
  
  
  
  
  
  
- SUB BL, AL
  
  
  
  
  
  
  
  
  
  
- JNZ label
  
  
  
  
  
  
  
  
  
  
- JB label (B = below = unsigned less than)
  
  
  
  
  
  
  
  
  
  
- ROL AL, 5