16.317: Microprocessor Systems Design I

Fall 2013

Lecture 5: Key Questions
September 13, 2013

1. **Example:** Compute the linear address for the specified operand in each of the following instructions. The register contents and variables are as follows:

- $(CS) = 0A00_{16}$
- $(DS) = 0B00_{16}$
- $(ESI) = 00000100_{16}$
- $(EDI) = 00000200_{16}$
- $(EBX) = 00000300_{16}$

a. Destination operand in: MOV [DI], AX

b. Source operand in: MOV DI, [SI]

c. Destination operand in: MOV [BX+0400H], CX

d. Destination operand in: MOV [DI+0400H], AH

e. Destination operand in MOV [BX+DI+0400H], AL