**CSCI 360 MVC and CLC Instructions**

**SS Instructions (Storage to Storage Instructions)**

* have 2 D(B) operands
* 6 byte instructions
* 3 encoding formats

**Move Character**

* Format: label MVC D1(L,B1),D2(B2)
* Moves L bytes from D2(B2) to D1(B1)
* L is decimal number between 0 and 256

    MVC 0(8,R10),0(R4) ==> moves 8 bytes from 0(R4) to 0(R10)

    MVC NUM1(6),BUFFER ==> moves 6 bytes from BUFFER to NUM1

**Compare Logical Character**

* Format: label CLC D1(L,B1),D2(B2)
* Compares L EBCDIC bytes at D1(B1) with L EBCDIC bytes at D2(B2) one byte at a time
* L is decimal number between 0 and 256
* Should be used for characters
* Sets Condition Code  
    
  Code Meaning  
   0 Equality  
   1 first operand < second operand  
   2 first operand > second operand

NUM1 DC F'10'  
 NUM2 DC F'5'

    L R3,NUM1  
    C R3,NUM2

    RESULT: NUM1 is greater than NUM2

    CLC NUM1(4),NUM2

    RESULT: NUM1 is less than NUM2.

    Will work in this example since 0A is greater than 05

NUM1 00 00 00 0A  
NUM2 00 00 00 05

    What if NUM2 DC F'-5'?

    RESULT: will not work because 00 is less than FF

NUM1 00 00 00 0A  
NUM2 FF FF FF FB