EN605.204.82.SU17 Computer Organization

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Assignment 9a

```
(1)  +    #1    #3    i1        # lower2 + 1
(2)  -    #19   i1    i2        # upper2 - (lower2 + 1)
(3)  *    K     #3    i3        # 3 * K
(4)  +    i3    #1    i4        # (3*K) + 1
(5)  -    i3    #3    i5        # Y: s2 - lower2
(6)  -    i4    #3    i6        # X: s2 - lower2
(7)  :=   #1          I         # I = 1
(8)  BGT  I     #12   (21)      # Branch if I > 12
(9)  -    I     #1    i7        # s1 - lower1
(10) *    i7    i2    i8        # (s1-lower1)*(up2-low2+1)
(11) +    i8    i5    i9        # Y addr
(12) +    i8    i6    i10       # X addr
(13) *    i9    #4    i11       # Y addr * wordsize
(14) *    i10   #4    i12       # X addr * wordsize
(15) []=  Y     i11   i13       # Get element addr for Y
(16) []=  X     i12   i14       # Get element addr for X
(17) :=   i13         i14       # assign y[i13] to x[i14]
(18) +    I     #1    i15       # add one to I
(19) :=   i15         I         # assign new val to I
(20) JMP              (8)       # Jump to loop begin
(21)
```