EN605.204.82.SU17 Computer Organization

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Assignment 9a

```
(1)   :=    #1              I           # I := 1
(2)   BGT   I      #12   (21)           # 1 to 12 DO
(3)   –     I      #1      i1           # s2 – lower1
(4)   *     i1     #17     i2           # i1 * (upper2-lower2+1)
(5)   *     #3     K       i3           # 3*K = s2
(6)   –     i3     #3      i4           # s2 – lower2
(7)   +     i2     i4      i5           # i2 + (s2-lower2)
(8)   *     i5     #4      i6           # Y addr * word size
(9)   –     I      #1      i7           # s2 –lower1 for X
(10)  *     i7     #17     i8           # i7 * (upper2-lower2+1)
(11)  +     K      #1      i9           # K+1
(12)  *     i9     #3      i10          # 3*K+1
(13)  –     i10    #3      i11          # s2 – lower2
(14)  +     i8     i11     i12          # i8 + (s2 – lower2)
(15)  *     i12    #4      i13          # X addr * word size
(16)  []=   Y      i6      i14          # Get element addr for Y
(17)  []=   X      i13     i15          # Get element addr for X
(18)  :=    i14            i15          # X[i15] = Y[i14]
(19)  +     I      #1      I            # increment I
(20)  JMP               (2)             # Jump to loop begin
(21)
```