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