* 1. .ORIG x3001
  2. AND R0, R0, #0 ; R0 <- 0
  3. NOT R1, R1
  4. ADD R1, R1, #1
  5. ADD R3, R1, R2
  6. BRz x3008
  7. BRn x300C
  8. BRp x300A
  9. ADD R0, R0 #0
  10. BRnzp x300d
  11. ADD R0, R0, #1
  12. HALT
  13. .ORIG x3000
  14. AND R0, R0, #0
  15. AND R3, R3, #0
  16. ADD R3, R3, #1
  17. AND R2, R5, #4
  18. BRz x3006
  19. .ORIG x3000
  20. AND R0, R0, #0
  21. ADD R0, R0, #1
  22. AND R3, R3, #0
  23. ADD R3, R3, #1
  24. AND R2, R5, #4
  25. BRz x3007
  26. .ORIG x3000
  27. AND R1,R1, #0 ; FINAL RESULT
  28. AND R3,R3, #0 ; PLACEHOLDER
  29. AND R4,R4, #0 ; INCREMENT
  30. ADD R4, R4, #15
  31. ADD R4, R4, #1
  32. ADD R3, R3, #1
  33. LOOP AND R6, R0, R3
  34. BRz, INCREMENT
  35. ADD R1, R1, #1
  36. ADD R3, R3, R3
  37. INCREMENT ADD R4, R4, #-1
  38. BRz, LOOP
  39. .END
  40. .ORIG x3005
  41. 1110 010 000001011
  42. 0110 100 010 000000
  43. 0001 100 100 1 11101
  44. 0000 011 111111110
  45. 1111 0000 00011001
  46. .END
  47. .ORIG x3000
  48. LD R2, PLACEHOLDER
  49. ADD R3, R3, R2
  50. ST R3, A
  51. HALT
  52. A .FILL #0
  53. PLACEHOLDER .FILL #30
  54. .END

1. HALT tells the simulator to stop a program that is running, .END tells the assembler to stop assembling the code