

MLS - COMPUTER 8x8 GRID SET-UP

```

0932 22 DEC R2 ;Stack pointer free
      33 8A GLO RA ;RA="I"=base address computer board (set by caller)
      34 FC ADI ;Add 63 hex to RA.0 to find last address of board
      35 63
      36 52 STR R2 ;Push RA.0 + 63 hex
      37 F8 LDI ;D=FF byte for board's borders
      38 FF
      39 5A STR RA ;Store FF @ M(R(A))
      3A 8A GLO RA ;D=RA.0 to test for done
      3B 1A INC RA ;RA+1 for next byte (if not done)
      3C F3 XOR ;Compare RA.0:byte on stack
      3D 3A BNZ ;If ≠ yet, loop back to continue, else
      3E 37 ; fall through to next part
      3F EA SEX RA

0940 8A GLO RA ;D=RA.0
      41 FF SMI ;Subtract 0A from RA.0 address to prepare
      42 0A ;for next part
      43 AA PLO RA ;Return adjusted address to RA.0
      44 F8 LDI
      45 08
      46 AC PLO RC ;Set RC.0=08=loop count #1 (main)
      47 2A DEC RA ;RA=RA-02 to skip over FF border bytes
      48 2A DEC RA
      49 F8 LDI
      4A 08
      4B AD PLO RD ;Set RD.0=08=loop count #2 (secondary)
      4C 94 GHI R4 ;(=00 as R4 always address 0042 at this point)
      4D 73 STXD ;Store @ M(R(X))=RA and decrement RA by 1
      4E 2D DEC RD ;Decrement loop count #2
      4F 8D GLO RD ;D=RD.0 = loop count #2

0950 3A BNZ ;If ≠ 00, branch up to store 8 00's total
      51 4C
      52 2C DEC RC ;Decrement loop count #1
      53 8C GLO RC ;D=RC.0 = loop count #1
      54 3A BNZ ;If ≠ 00, branch up to store 8 00's total
      55 47
      56 12 INC R2 ;Reset stack pointer
      57 D4 SEP R4 ;Return control to Chip-8 Interpreter

```