

```

090A FE SHL      ;      "      "      " (total x 8 here)
    0B F4 ADD      ;Add (x 8 value) + (x 2 value)=(x 10 value total)
    0C 26 DEC     R6 ;R6 points to Chip-8's VA=VX board coordinate
    0D E6 SEX     6  ;X=6 for next add instruction
    0E F4 ADD      ;Add (x 10 VY value)+(VX value)=address
    0F AA PLO     RA ;RA.0=D--put result in RA to address board square

0910 12 INC      R2 ;Reset stack pointer
    11 30 BR      ;Branch to exit @ 0900
    12 00

```

0913-0917 -- Not used -- FILLER

SUB HANDLER (FOR RUNNING ROUTINES IN R4)

```

0918 93 GHI      R3 ;D=R3.1
    19 B4 PHI      R4 ;R4.1=R3.1
    1A 83 GLO      R3 ;D=R3.0
    1B A4 PLO      R4 ;R4.0=R3.0--set R4=return address to sub
    1C D4 SEP      R4 ;Calling sub runs in R4
    1D F8 LDI      ;Handler's PC points to here
    1E 00
    1F B4 PHI      R4 ;Set R4=0042 for return to Chip-8

0920 F8 LDI      ; Interpreter control
    21 42          ;      "      "      "      "
    22 A4 PLO      R4 ;      "      "      "      "
    23 D4 SEP      R4 ;Return control to Chip-8 Interpreter

```

MLS - SEARCH SUB

```

0924 E2 SEX      2  ;X=2
    25 22 DEC     R2 ;Stack pointer free
    26 8E GLO     RE ;D=Index #1
    27 52 STR     R2 ;Push for adding
    28 06 LDN     R6 ;D=M(R(6)) = VA = VX
    29 F4 ADD      ;Add to index on stack
    2A 56 STR     R6 ;Return to M(R(6)) = VA
    2B 8F GLO     RF ;D=Index #2
    2C 52 STR     R2 ;Push for adding
    2D 07 LDN     R7 ;D=M(R(7)) = VB = VY
    2E F4 ADD      ;Add to index on stack
    2F 57 STR     R7 ;Return to M(R(7)) = VB

0930 30 BR      ;Branch to refer entry to conclude sub
    31 03          ;      @ 0903 (stack reset there too)

```