## MLS - SORT HAND

```
0B16
      22
           DEC
                  R2 ;Stack free
  17
      94
           GHI
                  R4 ; (D=00); Begin sort
  18
      AD
           PLO
                  RD
  19
      9A
           GHI
                  RA : RE=RA = i = data base
  1A
      BE
           PHI
                  RE
  1B
      8A
           GLO
                  RA
  1C
      AE
           PLO
                  RE
  1D
      8D
           GLO
                  RD ;Get # "good" comparisons
  1E
      FB
           XRI
  1F
      04
                     :Test if = N-1 (N=5 cards in each hand)
0B20
      3A
           BNZ
  21
      24
  22
      12
           INC
                  R2 ; Inc stack pointer to reset
  23
      D4
           SEP
                  R4 : Return control to Chip-8 Interpreter
  24
      1D
           INC
                  RD ; Count the comparison
  25
26
      4E
                  RE ;Get byte Xi - (i+1)
           LDA
      BF
           PHI
                  RF ; RF.1 holds Xi
  27
28
      FA
           ANI
                     ;"AND" with OF to
      OF
                     ;strip off suit
  29
      52
           STR
                  R2 : Push for comparing
  2A
      0E
           LDN
                  RE ;Get byte Xi+1
  2B
           PLO
                 RF ; RF.0 holds Xi+1
      AF
                     ; "AND" with OF to
  20
      FA
           ANI
  2D
      OF
                     strip off suit
      F7
                     ;Subtract D-M(R(X)) ((Xi+1)-Xi)
  2E
           SM
  2F
      33
                     ; If (Xi+1)≥ Xi, branch to OB1D
           BPZ
                         no need to sort - order correct
0B30
      1D
  31
      9F
           GHI
                 RF ; Else get Xi
                                         S
                                                   В
  32
33
34
      5E
2E
                                                    Y
           STR
                 RE ;Store @ i+1
                                          W
           DEC
                 RE ;i-1
                                                     T
      8F
           GLO
                 RF ;Get Xi+1
                                                       Ē
      5E
30
           STR
                  RE :Store @
                               i
                     :Loop for next set of comparisons
           BR
      17
                            to 0E17
```

## MLS - DISPLAY HANDS DECODING

```
OB38 8A GLO RA
39 AF PLO RF :RF.O=RA.O (save address top card in hand)
3A F8 LDI
3B OC
```