# C H I P - 8  M E S S A G E R

## PROGRAM LISTING

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0244  22  DEC   R2  ;Stack to free location
0245  15  INC   R5  ;Point to second half of DXYN instruction
0246  93  GHI   R3  ;R3=PC here
0247  B4  PHI   R4  ;
0248  F8  LDI       ;
0249  4C            ;Prepare R4 to become PC
024A  A4  PLO   R4  ;
024B  D4  SEP   R4  ;R4 becomes PC
024C  F8  LDI       ;
024D  F5            ;
024E  A6  PLO   R6  ;R6 points to CHIP-8 variable VX.  R6.1
024F  A7  PLO   R7  ;Was set in Fetch routine.  R7 is VY
0250  17  INC   R7  ;
0251  06  LDN   R6  ;Get value of VX
0252  BF  PHI   RF  ;And save it in RF.1 for later reset
0253  9A  GHI   RA  ;
0254  73  STXD      ;Push RA.1
0255  8A  GLO   RA  ;
0256  52            ;Push RA.0 - saves ASCII code pointer
0257  4A  LDA   RA  ;Get ASCII code - advance pointer
0258  32  BZ        ;Branch if null (00) - end of line
0259  95            ;To Exit routine
025A  FE  SHL       ;Multiply
025B  FE  SHL       ;By 04
025C  AC  PLO   RC  ;
025D  F8  LDI       ;
025E  07            ;Page address of character set
025F  7C  ADCI      ;Add carry, if any, from
0260  00            ;The Multiply instruction
0261  BC  PHI   RC  ;RC is indexed to the character bit pattern
0262  1C  INC   RC  ;Points to last bit pattern
0263  1C  INC   RC  ;  "     "   "    "     "
0264  1C  INC   RC  ;  "     "   "    "     "
0265  94  GHI   R4  ;(=02)
0266  BA  PHI   RA  ;
0267  F8  LDI       ;
0268  EF            ;
0269  AA  PLO   RA  ;RA points to CHIP-8 work area
026A  F8  LDI       ;
026B  04            ;
026C  AF  PLO   RF  ;Loop count
026D  2A  DEC   RA  ;
026E  0C  LDN   RC  ;Get pattern
026F  FE  SHL       ;Shift left for LSB's
```