hex naar decimaal

bv.

0 1 2 3 4 5 6 7 8 9 A B C D E F
10 11 12 13 14 15

D018

$16^0 \cdot 8 = 8$

$16^1 \cdot 1 = 16$

$16^2 \cdot 0 = 0$

$16^3 \cdot D (13) =$

A = 10
B = 11
C = 12
D = 13
E = 14
F = 15

$8 + 16 + 0 + (4096 \cdot 13) =$

$8 + 16 + 0 + 53248 = \underline{53272}$

HIGHBYTE = INT (ADRES / 256)

LOWBYTE = ADRES - (HIGHBYTE * 256)

HIGHBYTE in 789 (0315)

LOWBYTE in 788 (0314)

ADRES = start adres programma

```
SEI
LDX #$00  }
LDY #$C0  }  ──────→   interupt prog. D.V. op
STX $0314                  $C000
STY $0315
CLI
RTS
```

```
.,1000 A2 00      LDX #$00
.,1002 8E A7 02   STX $02A7
.,1005 AD A7 02   LDA $02A7
.,1008 C9 08      CMP #$08
.,100A F0 F4      BEQ $1000
.,100C AD 11 D0   LDA $D011
.,100F 29 F8      AND #$F8
.,1011 6D A7 02   ADC $02A7
.,1014 8D 11 D0   STA $D011
.,1017 EE A7 02   INC $02A7
.,101A A2 00      LDX #$00
.,101C A0 00      LDY #$00
.,101E C8         INY
.,101F C0 FF      CPY #$FF
.,1021 D0 FB      BNE $101E
.,1023 E8         INX
.,1024 E0 FF      CPX #$FF
.,1026 D0 F4      BNE $101C
.,1028 4C 05 10   JMP $1005
```

scrolling

WACHT OP SPATIE BALK ($20)

```
.?
.,C000 20 E4 FF   JSR $FFE4        ─── scan keyboard
.,C003 C9 00      CMP #$00         ─── niets?
.,C005 F0 F9      BEQ $C000        ─── ga dan terug
.,C007 C9 20      CMP #$20         ─── is het 20 (spatie)?
.,C009 D0 F5      BNE $C000        ─── nee?, dan terug
.,C00B 60         RTS              ─── keer terug
```

wacht op spatie balk + kleuren achtergrond.

```
.
.,C000 A2 00      LDX #$00         ─── x op 0
.,C002 20 E4 FF   JSR $FFE4        ─── scan keyboard
.,C005 C9 00      CMP #$00         ─── niets?
.,C007 8E 20 D0   STX $D020        ─── x in 53280 ($D020)
.,C00A E8         INX              ─── hoog x 1 op
.,C00B F0 F5      BEQ $C002        ─── is a 0? ja?
.,C00D C9 20      CMP #$20         ─── is a 20?
.,C00F D0 F1      BNE $C002        ─── nee!
.,C011 60         RTS              ─── ja!
```

```
.,1000 20 44 E5   JSR $E544        ─── scherm schoon
.,1003 A9 00      LDA #$00
.,1005 8D 20 D0   STA $D020
.,1008 8D 21 D0   STA $D021
.,100B A9 1D      LDA #$1D          ─── 29
.,100D 8D 18 D0   STA $D018         ─── 53272
.,1010 A9 D8      LDA #$D8          ─── 216
.,1012 8D 16 D0   STA $D016         ─── 53270
.,1015 A2 00      LDX #$00
.,1017 BD 00 20   LDA $2000,X
.,101A 9D 00 04   STA $0400,X
.,101D BD FF 20   LDA $2000,X   2100
.,1020 9D FF 04   STA $04FF,X   0500
.,1023 BD FE 21   LDA $21FE,X
.,1026 9D FE 05   STA $05FE,X
.,1029 BD FD 22   LDA $22FD,X
.,102C 9D FD 06   STA $06FD,X
.,102F BD 00 24   LDA $2400,X
.,1032 9D 00 D8   STA $D800,X
.,1035 BD FF 24   LDA $24FF,X
.,1038 9D FF D8   STA $D8FF,X
.,103B BD FE 25   LDA $25FE,X
.,103E 9D FE D9   STA $D9FE,X
.,1041 BD FD 26   LDA $26FD,X
.,1044 9D FD DA   STA $DAFD,X
.,1047 E8         INX
.,1048 E0 FF      CPX #$FF
.,104A D0 CB      BNE $1017
```

een scherm
inlezen

(kleur + tekens)

tekens op $2000 ⟹ 0400
$20FF ⟹ 04FF
$21FE ⟹ 05FE
$22FD ⟹ 06FD

kleur op $2400 ⟹ D800
$24FF ⟹ D8FF
$25FE ⟹ D9FE
$26FD ⟹ DAFD

0400 = 1024
D800 = 55296

fout! ↑
(dus...)