HEX TO ASCII CONVERSION

```
0285   9F   GHI  RF   ;Get the hex byte
  86   F6   SHR       ;Shift right x 04 for MSD
  87   F6   SHR
  88   F6   SHR
  89   F6   SHR
  8A   AE   PLO  RE   ;Put in RE.0 to pass to sub
  8B   D4   SEP  R4
  8C   02             ;Call Convert Hex/ASCII
  8D   98             ;(Answer in RE.0)
  8E   8E   GLO  RE   ;Put the result in RE.1
  8F   BE   PHI  RE
0290   9F   GHI  RF   ;Get same hex byte
  91   FA   ANI
  92   0F             ;"AND" with 0F for LSD
  93   AE   PLO  RE   ;Put in RE.0 to pass to sub
  94   D4   SEP  R4
  95   02             ;Call Convert Hex/ASCII
  96   98
  97   D5   SEP  R5   ;Return - two byte answer in RE.1 & RE.0
```

CONVERT HEX/ASCII

```
0298   8E   GLO  RE   ;Get digit passed by caller
  99   FD   SDI
  9A   09             ;09 - value (if negative, value > 09)
  9B   33   BPZ
  9C   A1             ;Branch if positive (a number)
  9D   8E   GLO  RE
  9E   FC   ADI       ;Add 07 to all letter values
  9F   07
02A0   AE   PLO  RE
  A1   8E   GLO  RE
  A2   FC   ADI       ;Always add 30 to complete conversion
  A3   30
  A4   AE   PLO  RE   ;Put result in RE.0
  A5   D5   SEP  R5   ;Return
```

POINT TO INSTRUCTION

```
02A6   E2   SEX  2    ;X = 2
  A7   8A   GLO  RA
  A8   FA   ANI       ;Strip last 4 bits from RA.0
  A9   F0
  AA   52   STR  R2   ;Push
  AB   F8   LDI
  AC   06             ;Or stack with 06 creating a byte N6 that
  AD   F1   OR        ;Will point to the instruction field
  AE   AA   PLO  RA   ;Put in RA.0
  AF   D5   SEP  R5   ;Return
```