free42 Code Attic

Mitch Richling

2021-03-19

Author: Mitch Richling Updated: 2021-05-14 18:16:08

Copyright 2021 Mitch Richling. All rights reserved.

Contents

1	Metadata
2	Introduction
	Tiny Number Printing 3.1 TNPR: Tiny number printer 3.2 PATN: Test TNPR by printing all characters
4	SGN: Sign function
5	EOF

1 Metadata

The home for this HTML file is: https://richmit.github.io/hp42/attic.html
A PDF version of this file may be found here: https://richmit.github.io/hp42/attic.pdf
Files related to this document may be found on github: https://github.com/richmit/hp42

2 Introduction

This is where old code goes...;)

3 Tiny Number Printing

3.1 TNPR: Tiny number printer

(TNPR) @@@@ DSC: Tiny Number PRint @@@@ IN: Z: Y coordinate for upper left point of character -- Top of screen is 1 0000 Y: X coordinate for upper left point of character -- Left of screen is 1 X: Character number -- integer in [0, 28] 0000 0000 OUT: No return @@@@ UPD: 2021-02-24 @@@@ BUG: Characters can be *VERY* tiny in high resolution modes on DM42 @@@@ Designed to print numbers: 101010b Binary | 1234567 Decimal | 123e+45 Float | 123/456 Rational | 123 i56 Complex 0000 1A8F10h Hexadecimal | 123,456 Decimal | 12×10^3 Float | 123456° Degrees | 123 ∡56 Complex | -123456 Signed Dec | 1.34567 Float | 0000 154823o Octal

```
0000 Characters can be underlined
0000 Characters are 3x5 pixels in size. Underlined characters are 3x7.
     - Stock HP-42s screen: 32 characters across. Two full lines on the screen.
@@@@ Non-Underlined Character numbers:
        00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
         0 1 2 3 4 5 6 7 8 9 A B C D E F e -+\times/ ^UNK , . ° b o h i \angle SPC
0000
0000
        48 49 50 51 52 53 54 55 56 57 65 66 67 68 69 70 16 45 43 01 00 94 -- 23 46 19 98 111 104 105 23 32
0000 C Y Y Y Y Y Y Y Y Y Y
                                                     Y Y Y
                                                                       Y Y
                                                                       Y Y
0000 R Y Y Y Y Y Y Y Y Y
                                                     Y Y Y
                                                       Y Y
0000 B Y Y
0000 O Y Y Y Y Y Y Y Y
@@@@ Add 40 to the above character number for the underlined version
LBL "TNPR"
FUNC 30
           @@## REQ:free42>=2.5.24
           @@## REQ:free42>=3.0
L4STK
ΙP
XEQ IND ST X
R.J
AGRAPH
RTN
LBL 00
           @@@@ CHAR: O
"•µ•"
           @@@@ #b11111 #b10001 #b11111
RTN
LBL 01
           @@@@ CHAR: 1
"£•←"
           @@@@ #b10010 #b11111 #b10000
RTN
LBL 02
           @@@@ CHAR: 2
"ÜÑ∡"
            @@@@ #b11101 #b10101 #b10111
RTN
LBL 03
            @@@@ CHAR: 3
"μÑ•"
           @@@@ #b10001 #b10101 #b11111
RTN
LBL 04
            0000 CHAR: 4
"π□•"
            @@@@ #b00111 #b00100 #b11111
RTN
LBL 05
            0000 CHAR: 5
"∡ÑÜ"
            @@@@ #b10111 #b10101 #b11101
RTN
LBL 06
           @@@@ CHAR: 6
"●ÑÜ"
           @@@@ #b11111 #b10101 #b11101
RTN
LBL 07
           @@@@ CHAR: 7
"xxe"
           @@@@ #b00001 #b00001 #b11111
RTN
LBL 08
           @@@@ CHAR: 8
"•Ñ•"
           @@@@ #b11111 #b10101 #b11111
RTN
LBL 09
           0000 CHAR: 9
"∡Ñ•"
            @@@@ #b00111 #b00101 #b11111
RTN
LBL 10
           0000 CHAR: A
"•∑•"
            @@@@ #b11111 #b00101 #b11111
RTN
LBL 11
           0000 CHAR: B
"●Ñ[LF]"
           @@@@ #b11111 #b10101 #b01010
RTN
```

```
LBL 12
             @@@@ CHAR: C
"↓µµ"
             @@@@ #b01110 #b10001 #b10001
RTN
LBL 13
             @@@@ CHAR: D
"•μ↓"
             @@@@ #b11111 #b10001 #b01110
RTN
LBL 14
             0000 CHAR: E
"•ѵ"
             @@@@ #b11111 #b10101 #b10001
RTN
LBL 15
             0000 CHAR: F
"∙∑×"
             @@@@ #b11111 #b00101 #b00001
RTN
LBL 16
             0000 CHAR: e
"[LF]ÑÑ"
             @@@@ #b01010 #b10101 #b10101
RTN
LBL 17
             0000 CHAR: -
"000"
              @@@@ #b00100 #b00100 #b00100
RTN
LBL 18
             0000 CHAR: +
"□↓□"
              @@@@ #b01110 #b00100 #b01110
RTN
LBL 19
             0000 CHAR: ×
"[LF] [LF] " @@@@ #b01010 #b00100 #b01010
RTN
LBL 20
             0000 CHAR: /
"⊨□∫"
             @@@@ #b11000 #b00100 #b00011
RTN
LBL 21
             @@@@ CHAR: ^
             @@@@ #b00010 #b000010 #b00010
LBL 22
             @@@@ CHAR: :
"÷[LF]÷"
             @@@@ #b00000 #b01010 #b00000
"•••"
             0000 #b11111 #b11111 #b11111
RTN
LBL 23
             @@@@ CHAR: ,
"÷ز÷"
             @@@@ #b10000 #b01000 #b00000
RTN
LBL 24
             0000 CHAR: .
"÷+÷"
             @@@@ #b00000 #b10000 #b00000
RTN
LBL 25
             0000 degrees
\sqrt["]{\Sigma}\sqrt{"} RTN
             @@@@ #b00010 #b00101 #b00010
LBL 26
             @@@@ CHAR: b
"•Å; "
             @@@@ #b11111 #b10100 #b01000
RTN
LBL 27
             @@@@ CHAR: o
"≠£≠"
              @@@@ #b01100 #b10010 #b01100
RTN
LBL 28
             0000 CHAR: h
"●□目"
             @@@@ #b11111 #b10100 #b11000
RTN
LBL 29
             @@@@ CHAR: i
"ֆ÷"
             @@@@ #b00000 #b11101 #b00000
RTN
LBL 30
             0000 CHAR: ∠
"EÅ£"
             @@@@ #b11000 #b10100 #b10010
```

```
RTN
LBL 31
             @@@@ CHAR: SPC
"÷÷÷"
             @@@@ #b00000 #b00000 #b00000
RTN
LBL 40
             @@@@ CHAR: O
"_Q_"
             @@@@ #b1011111 #b1010001 #b1011111
RTN
LBL 41
             0000 CHAR: 1
"R P"
             @@@@ #b1010010 #b1011111 #b1010000
RTN
LBL 42
             @@@@ CHAR: 2
"עטר"
             @@@@ #b1011101 #b1010101 #b1010111
RTN
LBL 43
             @@@@ CHAR: 3
"QU_"
             @@@@ #b1010001 #b1010101 #b1011111
RTN
LBL 44
             @@@@ CHAR: 4
"GD_"
             @@@@ #b1000111 #b1000100 #b1011111
RTN
LBL 45
             0000 CHAR: 5
"WU] "
             @@@@ #b1010111 #b1010101 #b1011101
RTN
             0000 CHAR: 6
LBL 46
"_U] "
             @@@@ #b1011111 #b1010101 #b1011101
RTN
LBL 47
             0000 CHAR: 7
"AA_"
             @@@@ #b1000001 #b1000001 #b1011111
RTN
LBL 48
             0000 CHAR: 8
"_U_"
             @@@@ #b1011111 #b1010101 #b1011111
RTN
LBL 49
             0000 CHAR: 9
"GE_"
             @@@@ #b1000111 #b1000101 #b1011111
RTN
LBL 50
             @@@@ CHAR: A
"_E_"
             @@@@ #b1011111 #b1000101 #b1011111
RTN
LBL 51
             0000 CHAR: B
"_UJ"
             @@@@ #b1011111 #b1010101 #b1001010
RTN
LBL 52
             0000 CHAR: C
"NQQ"
             @@@@ #b1001110 #b1010001 #b1010001
RTN
LBL 53
             @@@@ CHAR: D
"_QN"
             @@@@ #b1011111 #b1010001 #b1001110
RTN
LBL 54
             0000 CHAR: E
"_UQ"
             @@@@ #b1011111 #b1010101 #b1010001
RTN
LBL 55
             0000 CHAR: F
"_EA"
             @@@@ #b1011111 #b1000101 #b1000001
RTN
LBL 56
             0000 CHAR: e
"JUU"
             @@@@ #b1001010 #b1010101 #b1010101
RTN
LBL 57
             @@@@ CHAR: -
"DDD"
             @@@@ #b1000100 #b1000100 #b1000100
```

```
RTN
LBL 58
            0000 CHAR: +
"NDN"
            @@@@ #b1001110 #b1000100 #b1001110
RTN
LBL 59
            0000 CHAR: ×
"JDJ"
            @@@@ #b1001010 #b1000100 #b1001010
RTN
LBL 60
            0000 CHAR: /
"XDC"
            @@@@ #b1011000 #b1000100 #b1000011
RTN
            @@@@ CHAR: ^
LBL 61
"BAB"
            @@@@ #b1000010 #b1000001 #b1000010
RTN
LBL 62
            @@@@ CHAR: :
"@J@"
            @@@@ #b1000000 #b1001010 #b1000000
            @@@@ #b1011111 #b1011111 #b1011111
RTN
LBL 63
            @@@@ CHAR: ,
"PH@"
            @@@@ #b1010000 #b1001000 #b1000000
RTN
LBL 64
            @@@@ CHAR: .
"@P@"
            @@@@ #b1000000 #b1010000 #b1000000
RTN
LBL 65
            @@@@ degrees
"BEB"
            @@@@ #b1000010 #b1000101 #b1000010
RTN
LBL 66
            @@@@ CHAR: b
"_TH"
            @@@@ #b1011111 #b1010100 #b1001000
RTN
LBL 67
            0000 CHAR: o
"LRL"
            @@@@ #b1001100 #b1010010 #b1001100
RTN
LBL 68
            0000 CHAR: h
"_TX"
            @@@@ #b1011111 #b1010100 #b1011000
RTN
LBL 69
            0000 CHAR: i
"@]@"
            @@@@ #b1000000 #b1011101 #b1000000
RTN
LBL 70
            0000 CHAR: ∠
"XTR"
            @@@@ #b1011000 #b1010100 #b1010010
RTN
LBL 71
            0000 CHAR: SPC
"@@@"
            @@@@ #b1000000 #b1000000 #b1000000
RTN
END
   PATN: Test TNPR by printing all characters
(PATN)
0000 DSC: Print All Tiny Number Characters
LBL "PATN"
CLLCD
0.031
STO 00
LBL 00
1
```

RCL 00

```
RCL 00
XEQ "TNPR"
RCL 00
RCL 00
40
ΙP
XEQ "TNPR"
ISG 00
GTO 00
RTN
END
4 SGN: Sign function
(SGN)
@@@@ DSC: Sign function
0000 IN: X: a number
@@@@ OUT: X: 0 when input was 0
          -1 when input was negative
0000
          1 when input was positive
@@@@ UPD: 2021-02-26
0000 TST: free42_3.0
LBL "SGN"
FUNC 11
                 @@## REQ:free42>=2.5.24
L4STK
                 @@## REQ:free42>=3.0
ENTER
ABS
X=0?
RTN
RTN
END
```

5 EOF