

71-00004

PROGRAM DESCRIPTION

Program Title Banner
 Contributor Hewlett-Packard Company
 Address 1000 NE Circle Blvd
 City Corvallis State Oregon Country U.S.A.
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Program Description (include equations) The lex file contains one keyword: BANNER\$. BANNER\$ is a banner-building tool. It takes a string argument of from 1 to 3 characters, and returns a 48-character string representing a 6x8 "banner" of the characters. For example, BANNER\$ ("A") returns the string:

" AAA A A A A AAAAA A A A A A A ",

which, when printed in 8 rows of 6 characters, is:

```

+-----+
|  AAA  |
|  A   A |
|  A   A |
| AAAAA |
|  A   A |
|  A   A |
|  A   A |
+-----+

```

(border shown for emphasis only)

Necessary Accessories None
 Supported Accessories N/A
 Operating limits and warnings _____
 File name(s) BANNER
 Size of file(s) 202 bytes Additional RAM Requirement to run the program None
 References _____

This program has been verified only with respect to the numerical example give in Program Description. User accepts and uses this program material AT HIS OWN RISK, in reliance solely upon his own inspection of the program material and without reliance upon any representation or description concerning the program material.
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CHAPTER 2
BANNER

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New LEX File Indicates "BNR:A" in VER\$ string.

Program Title: Banner-building utility.

Category Number(s): ???

File Name(s): BANNER.

Primary Category Name: ???

Size of File(s): 202 bytes.

Additional RAM Requirement: None.

Abstract: String keyword to create banner-type representations of characters in the built-in or alternate character sets. This allows easy printing of banners (posters) using large characters.

Necessary Accessories: None.

Supported Accessories: N/A.

2.1 Program Description

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SAMPLE PROBLEM

The following program implements a large-display clock on the screen of an HP 82163A video interface. It requires an HPIL interface and an HP 82163A.

The program works by figuring out the current time, converting to 12-hour format and "painting" the banner representations of the numbers and the am/pm indicators on the screen using cursor control escape sequences for the 82163A. The banner is built out of the CHR\$ (160) character, which displays as a white block on the HP 82163A.

```

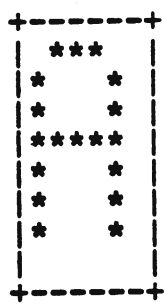
10 PRINTER IS :DISPLAY @ DISPLAY IS *
20 PWIDTH INF @ DELAY 0 @ DESTROY ALL
30 CLEAR :DISPLAY
40 T$="      "
50 M$="      "
60 U$=TIME$ @ T=VAL(U$[1,2])
70 IF T<12 THEN N$="am" ELSE N$="pm"
80 T=MOD(T-1,12)+1
90 U$[1,1]="  "
100 IF T<10 THEN U$[2,2]=STR$(T) ELSE U$[1,2]=STR$(T)
110 DISP U$[1,5]&" "&N$
120 FOR I=1 TO 5
130 IF T$[I,I]#U$[I,I] THEN CALL DSPDGT(U$[I,I],I,0)
140 NEXT I
150 T$=U$
160 FOR I=1 TO 2
170 IF M$[I,I]#N$[I,I] THEN CALL DSPDGT(N$[I,I],I+1.5,7)
180 NEXT I
190 M$=N$
200 WAIT 60-MOD(TIME,60) @ GOTO 60
210 SUB DSPDGT(D$,P,S)
220 DIM Z9$(48)
230 Z9$=BANNER$(D$[1,1]&CHR$(160))
240 FOR Z9=1 TO 8
250 PRINT CHR$(27)&"%"&CHR$(6*(P-1))&CHR$(Z9+S-1);
260 PRINT Z9$(Z9*6-5,Z9*6-1)&CHR$(27)&"<"
270 NEXT Z9
280 END SUB

```

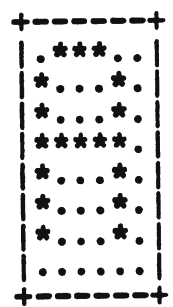
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(Continuation Page)

If the argument is two characters long, the second character is used as an alternate building character, so BANNER\$("A*") is:



If the argument is three characters long, the third character is used as an alternate space character, so BANNER\$("A*.") is:



BANNER\$ works for the built-in character set and for any characters defined in the alternate character set.