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10 *****
20 *
30 * Graphic demo for all Kaypro 84s
40 *
50 * By Rick Bartlett of software support
60 *
70 * Copyright (C) 1984 by Kaypro Computer Corp.
80 * No warranty is made, expressed, or implied.
90 *
100 *****
110
120 *****
130 * These are some examples of Graphics with M-Basic
140 * but keep in mind that when using Graphics the
150 * screen is 100 down & 160 wide. But when printing
160 * a 'NONE' Graphic character the screen is 24 down
170 * & 80 wide.
180 *****
190
200 ** Initialize variables **
210 WIDTH 255
220 CLEAR.SCREEN$ = CHR$(26)
230 ESC$ = CHR$(27)
240 INVERSE.ON$ = ESC$ + "B0"
250 INVERSE.OFF$ = ESC$ + "C0"
260 REDUCE.ON$ = ESC$ + "B1"
270 REDUCE.OFF$ = ESC$ + "C1"
280 BLINKING.ON$ = ESC$ + "B2"
290 BLINKING.OFF$ = ESC$ + "C2"
300 UNDERLINE.ON$ = ESC$ + "B3"
310 UNDERLINE.OFF$ = ESC$ + "C3"
320 CURSOR.ON$ = ESC$ + "B4"
330 CURSOR.OFF$ = ESC$ + "C4"
340
350 ** Initialize easily to use Graphic functions **
360
370 The command below draws a line between stating row & column to ending
380 row & column. ie. Print Fline.on(1,1,100,160);
390
400 DEF FLINE.ON$(R1%,C1%,R2%,C2%) = ESC$ + "L" + CHR$(R1%+31) + CHR$(C1%+31) +
CHR$(R2%+31) + CHR$(C2%+31)
410
420 The command below erases a line between stating row & column to ending
430 row & column. ie. Print Fline.off(1,1,100,160);
440
450 DEF FLINE.OFF$(R1%,C1%,R2%,C2%) = ESC$ + "D" + CHR$(R1%+31) + CHR$(C1%+31)
+ CHR$(R2%+31) + CHR$(C2%+31)
460
470 The command below draws a pixel at the row & column that is giving.
480 ie. Print Fnpixel.on(50,80);
490
500 DEF FNPPIXEL.ON$(R1%,C1%) = ESC$ + "*" + CHR$(R1%+31) +CHR$(C1%+31)
510
520 The command below erases a pixel at the row & column that is giving.
530 ie. Print Fnpixel.off(50,80);
540
550 DEF FNPPIXEL.OFF$(R1%,C1%) = ESC$ + " " + CHR$(R1%+31) +CHR$(C1%+31)
560
570 The command below will position the cursor at any location on the screen.
580 ie. Print Fnposition.cursor(11,40);
590
600 DEF FNPOSITION.CURSOR$(R1%,C1%) = ESC$ + "=" + CHR$(R1%+31) + CHR$(C1%+31)

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630 ' * Begin the demo of the above functions *
640 ' *****
650 '
660 ' * This clears the screen & turn off the cursor, then it
670 ' * randomly picks a number between 1 & 100 for the row and
680 ' * randomly picks a number between 1 & 160 for the column.
690 ' * It then prints the two numbers at row 1, column 60 and the
700 ' * count number by placing the cursor at the locations.
710 ' * then it print a pixel at the giving location.
720 '
730 '
740 PRINT CLEAR.SCREEN$ ;
750 PRINT
760 PRINT "<< GRAPHIC DEMO FOR M-BASIC >>"
770 PRINT "Copyright (c) 1984 by Kaypro Computers"
780 PRINT
790 PRINT "Hit a key to begin ";
800 ' While waiting for a key to be hit, mix up the random numbers
810 WHILE KEY$ = ""
820     KEY$ = INKEY$
830     DUMMY% = RND(1)
840 WEND
850 '
860 PRINT CLEAR.SCREEN$ ; CURSOR.OFF$ ; UNDERLINE.ON$ ;
870 PRINT "<< Printing Pixels Randomly >>"
880 PRINT "Inverse video is  OFF"
890 PRINT "Reduce video is   OFF"
900 PRINT "Blinking is       OFF"
910 PRINT "Underline is      ON"
920 PRINT "Cursor is        OFF"
930 '
940 FOR I% = 1 TO 500
950     R% = INT((100-1) * RND(1) + 1)
960     C% = INT((160-1) * RND(1) + 1)
970     PRINT FNPOSITION.CURSOR$(1,50); "Row ="; R%; " Column ="; C%; " ";
980     PRINT FNPOSITION.CURSOR$(2,50); "Count ="; I%;
990     PRINT FNPIXEL.ON$(R%,C%);
1000 NEXT I%
1010 '
1020 '
1030 ' ** This is like above but it prints lines with random numbers at
1040 ' ** stating row, column & ending row, column.
1050 '
1060 PRINT CLEAR.SCREEN$ ; CURSOR.OFF$ ; INVERSE.ON$ ; REDUCE.ON$ ; UNDERLINE.ON
$ ;
1070 PRINT "<< Printing Lines Randomly >>"
1080 PRINT "Inverse video is  ON"
1090 PRINT "Reduce video is   ON"
1100 PRINT "Blinking is       OFF"
1110 PRINT "Underline is      ON"
1120 PRINT "Cursor is        OFF"
1130 '
1140 FOR I% = 1 TO 200
1150     R1% = INT((100-1) * RND(1) + 1)
1160     C1% = INT((160-1) * RND(1) + 1)
1170     R2% = INT((100-1) * RND(1) + 1)
1180     C2% = INT((160-1) * RND(1) + 1)
1190     PRINT FNPOSITION.CURSOR$(1,40); "Starting row ="; R1%;
1200     PRINT " Starting column ="; C1%; " ";
1210     PRINT FNPOSITION.CURSOR$(2,40); "Ending row ="; R2%;
1220     PRINT " Ending column ="; C2%; " ";
1230     PRINT FNPOSITION.CURSOR$(3,40); "Count ="; I%;
1240     PRINT FNLINE.ON$(R1%,C1%,R2%,C2%);

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1250 NEXT I%
1260 '
1270 '
1280 ' ** This shows the attribute commands **
1290 PRINT CLEAR.SCREEN$;
1300 PRINT
1310 PRINT
1320 PRINT "This is ";INVERSE.ON$;"INVERSE";INVERSE.OFF$;" Video."
1330 PRINT "This is ";REDUCE.ON$;"REDUCE INTENSITY";REDUCE.OFF$;" Video."
1340 PRINT "This is ";BLINKING.ON$;"BLINKING";BLINKING.OFF$;" Video."
1350 PRINT "This is ";UNDERLINE.ON$;"UNDERLINE";UNDERLINE.OFF$;" Video."
1360 PRINT
1370 PRINT" You can ";INVERSE.ON$;"also mix";REDUCE.ON$;" them up";UNDERLINE.ON$
1380 PRINT" in any way ";BLINKING.ON$;"you like.";INVERSE.OFF$;REDUCE.OFF$;" Thi
s should ";UNDERLINE.OFF$
1390 PRINT" help ";BLINKING.OFF$;"you with the graphics on the Kaypro computers.
"
1400 END

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Cursor Addressing

Def FNCUR\$(R,C) = CHR\$(27) + CHR\$(61) +
CHR\$(R+32) + CHR\$(C+32)

Use as follows

Print FNCUR\$(10,20) "Hello"

or Print FNCUR\$(20,20); Input "Name"; R