

AUSTRALASIAN USERS GROUP



SV-318/SV-328



# News Letter

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#### INTRO ....

Hi! it's me again. Another Newsletter down and would you believe it next month is no 12. A whole Year has rushed by. (Where did it go ???)

The book is now available from the group for the low cost of \$19.50 plus .50 P & P. Please support it as it took a lot of time to compile.

Many thanks to Mr. L.A. Dunning for his work with Exploring Basic I am sure we all welcome its return. Where does the man get his information???

Also welcome to Mr. J Collins who is now our new Librarian. You will find some words from him later in this Newsletter.

The program of the month comes from Mr. S.A. Morris and is a program that plays 5 Card Draw Poker. (Casino style) Its good fun and kept me busy playing until the early hours.

See you all next month ......





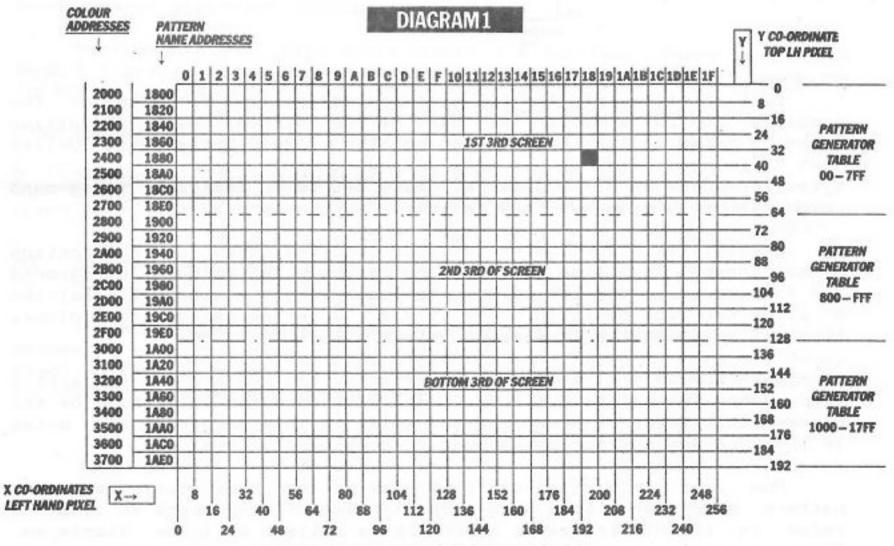
# EXPLORING BASIC Pt-5 By. L.A. Dunning

This month, I'll describe SCREEN 1. Due to some problems I'm unable to describe SCREEN 2 as promised, this will however appear next month. It is more difficult to analyse the modes other than Text however a general discription can be given.

#### GRAPHICS II (SCREEN 1)

The display is in graphics 2 mode when bit 1 of register  $\emptyset$  is set to 1 and bit 4 and 3 of register 2 are set to  $\emptyset$ . In this mode the screen is divided into 32 positions across by 24 positions down. This gives a total of 768 positions, each defining a block of 8 x 8 pixels giving a full resolution of 256 across by 192 down. Things are not however as simple as they seem.

The screen is divided into three smaller screens which for the sake of clarity I shall call "top", "middle", "bottom". The top screen describes the top 8 rows of positions, the middle describes the next 8 rows and the bottom describes the last 8 rows. Each screen operates by using a third of the pattern name table (NTB starts at 1800H), Pattern generator table (PGB starts at 0000H) and pattern colour table (COLB starts at 2000H). The top screen uses the initial third of these tables, the middle screen uses the second third of the tables and the bottom screen uses the last third.

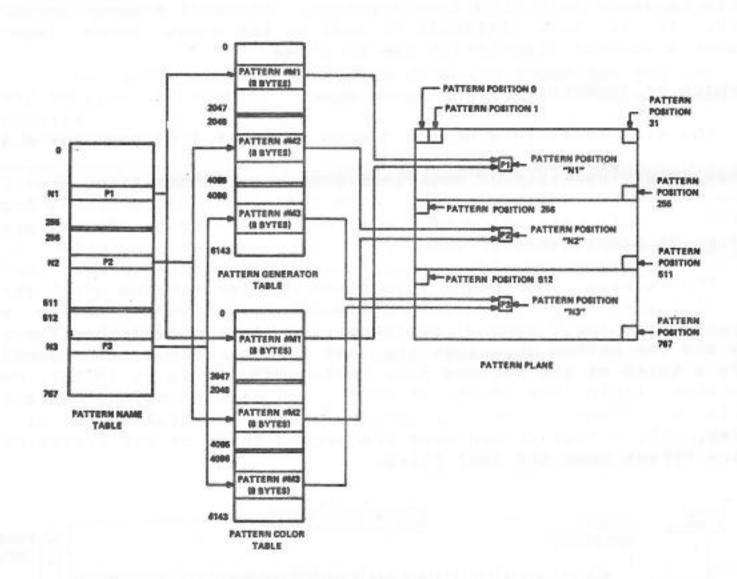


SCREEN RELATIONSHIPS GRAPHIC MODE II

"LOCATION OF ILL" BY PEXEL 192, 31 (SEE NOTES)
BY PATTERN NAME TABLE → 1898<sub>16</sub>
BY COLOUR TABLE 2418<sub>16</sub>



Each portion of the NTB consists of 256 bytes and allows any of 256 different patterns to be displayed at each position. As there are three of these, there can be 768 unique patterns on the screen, one for each position if necessary.



Each portion of the PGB contains definitions for each of the possible 256 patterns for that part of the screen, each definition being 8 bytes in length, so each portion is  $2\emptyset48$  bytes long. Unlike text mode, all bits are used for pattern definition so each set of 8 bytes produces an 8  $\times$  8 pattern. Bits set to 1 indicate foreground colour is used, bits set to  $\emptyset$  indicate that background colour is used.

Lastly, each portion of the COLB contains codes for that portion of the screen. Each line of a pattern can have two colours, background and foreground. Thus the COLB is the same length as the PGB requiring 8 bytes for each position. The bits  $\emptyset$  - 3 define background colour, the bits 4 - 7 define foreground colour.

When SCREEN 1 is set up, all bytes in the PGB are set to zero; a loop dumps the values Ø,1,2,3,... ...,255 once for each third of the screen (this setup is never changed while in this screen); all bytes in the COLB are set for background / foreground values.

How does this tie together? The pattern name table and the pattern generator table have a one-to-one correspondence so that a value in the NTB indicates which 8 byte pattern will be displayed. This is like text mode however each portion of the NTB / PGB is only relevent to that portion of the screen. Rather than change a value in



the NTB to display a different pattern on the screen, the software drivers change the patterns in the PGB instead, this is exactly reverse to the system used while in TEXT mode. Also of course, each position has its own colour definitions; this works but does produce unexpected results when trying to put 3 or more colours within an 8 pixel line. Diagram 2 illustrates the relationship between NTB, PGB & COLB. Diagram 3 illustrates how colour works for each position.

																	0	3	4 7
O WC	0	1	0	0	0	0	0	1	В	1	В	В	В	В	В	1	1 (BLACK)		B (LT. YELLOW)
1	0	0	1	0	0	0	1	0	В	В	7	В	В	В	7	В	7 (CYAN)		B (LT. YELLOW)
2	0	0	0	1	0	1	0	0	В	В	В	C	В	C	В	В	C (GREEN)		B (LT. YELLOW)
3	0	0	0	0	1	0	0	0	В	В	В	В	E	В	В	В	E (GRAY)	7	B (LT. YELLOW)
4	0	0	0	0	1	0	0	0	В	В	В	В	8	8	В	В	8 (MED. RED	))	B (LT. YELLOW)
5	0	0	0	0	1	0	0	0	В	В	8	В	5	B	8	В	5 (LT. BLUE)	7	B (LT. YELLOW)
6	0	0	0	0	1	0	0	0	В	В	8	В	6	В	В	В	6 (DK. RED)	7	B (LT. YELLOW)
7	0	0	0	0	1	0	0	0	В	В	В	В	D	В	В	В	D (MAGENTA	AI	B (LT. YELLOW)

PATTERN GENERATOR
TABLE ENTRY

PATTERN

PATTERN COLOR TABLE ENTRY

Diagram 1 shows the mapping in VRAM of NTB & PGB tables, it may prove useful when mapping a display. To further illustrate the relationship between the various tables in SCREEN 1 I've included listing 1, which demonstrates different functions.

Next month I'll talk about SCREEN 2 & Sprites. There were a few bugs & typos in the last two parts. In listing 1 in part 3, make the following changes:

#### LINE CHANGES

- 6 Delete POKE-1532, 25
- 7 Change line to GOTO 1Ø
- Change to GOSUB36: FORA=5TO1STEP-1: A\$(A)=RIGHT\$(SPRITE\$(63+A, 31)+LEFT\$(SPRITE\$(64+A),1): SPRITE\$(63+A)=STRING\$(32,Ø): NEXT: RETURN
- 47 Delete the RETURN at the end of line
- 48 Add line 48 as GOSUB36 : POKE-1533,25 : RETURN

These changes should ensure that the top four lines are restored properly and that the cursor is shunted off screen during a save. Also, in the chart in Part 4, change the value of the COLB in SCREEN 1 to 2000H, the other value was a typo.



#### LISTING 1.

```
10 REM SCREEN 1 Demo Program
20 WIDTH40:CLEAR1000:SCREEN1:DEFINTA-Z:NT=&H1800:CL=&H2000:PG=0:SA=&H1B00:SP=&H3
800
3Ø DIM V(255).DS(8).IS$(31)
4Ø CR==CHR=(13):RC==CHR=(28):LC==CHR=(29):UC==CHR=(3Ø):DC==CHR=(31):E==CHR=(27):
CC==CHR=(12):BS==CHR=(8):IN==CHR=(18):DL==CHR=(127):CE==CHR=(5):CN==CHR=(14)
50 RESTORE 920:FORA=1T08:READDS(A):NEXT:GOSUB190:REM Read Data for scroll
6Ø CLS:GOSUB11Ø
70 COLOR15:LOCATE0,8:PRINT" Press Function Key for Demonstration":PRINT" (1) S
croll":PRINT" <2> Column Print":PRINT" <3> Offset Print":PRINT" <4> Colour In
version": PRINT" (5) Input Routine for SCREEN 1"
8Ø GOSUB1ØØ
9Ø A$=INKEY$:GOTO9Ø
100 COLOR1:LOCATE192,24:PRINT"Top":LOCATE192,88:PRINT"Middle":LOCATE192,152:PRIN
T"Bottom": RETURN
11Ø GOSUB12Ø:GOSUB13Ø:GOSUB14Ø:RETURN
12Ø LINE(Ø,Ø)-(255.63).4.BF:RETURN
13Ø LINE(Ø,64)-(255,127),15,BF:RETURN
140 LINE (Ø, 128) - (255, 191), 14, BF: RETURN
15Ø GOSUB13Ø:GOSUB14Ø:RETURN
160 PRINT" Press ESC to exit Demonstration": RETURN
17Ø A==INPUT=(1):A=ASC(A=):AV=VAL("&h"+A=):RETURN
18Ø DD=STICK(Ø)ORSTICK(1):ST=ABS(STRIG(Ø)ORSTRIG(1)):RETURN
190 STOPON: ONSTOPGOSUB930: KEY ON: ONKEYGOSUB230, 320, 470, 600, 650: RETURN
200 PRINT: PRINT "Press (ENTER) to continue"
21Ø GOSUB17Ø: IFA$< >CR$GOTO21ØELSERETURN
220 REM Scroll
23Ø DM=2:LINE(Ø,Ø)-(255,63),1,B:COLOR4:LOCATE8,74:PRINT"Use Cursor Keys or Joyst
ick":PRINT" to Scroll Top Segment":PRINT" Press SPACEBAR/FIRE to restore":PRINT"
 All Scrolling is circular": GOSUB160
24Ø GOSUB29Ø
25Ø GOSUB9ØØ:GOSUB18Ø:IFDD+ST=ØGOTO25Ø
26Ø GOSUB27Ø:ONSTGOSUB28Ø:GOSUB3ØØ:GOTO24Ø
27Ø FORA=ØTO255:V(A)=(V(A)+DS(DD))MOD256:NEXT:RETURN
28Ø FORA=ØT0255:V(A)=A:NEXT:RETURN
29Ø FORA=ØTO255:V(A)=VPEEK(NT+A):NEXT:RETURN
300 FORA=0T0255: VPOKE(NT+A), V(A): NEXT: RETURN
310 REM Column Print
320 DM=2:COLOR4:LOCATE8,70:PRINT"This Demonstration resets the values on ":PRINT"
 the name table to produce columns of ": PRINT " PRINT rather than lines. ": PRINT" P
ress(1) (4) for blocks":PRINT" (2) (5) for columns":PRINT"
                                                                       <3> Restore
":GOSUB160
33Ø GOSUB900: IFA$=""GOTO33ØELSEAV=VAL(A$):ONAVGOSUB34Ø,39Ø,41Ø,35Ø,40Ø:GOTO33Ø
34Ø GOSUB12Ø:GOSUB45Ø
35Ø B=Ø:R=Ø:C=Ø:FORXX=ØTO255:VPOKENT+C+R*32+B*6,XX:C=C+1
36Ø IFC>50RB*6+C>31THENC=Ø:R=R+1
37Ø IFR>7THENR=Ø:B=B+1
38Ø NEXT: RETURN
39Ø GOSUB12Ø:GOSUB42Ø
400 XX=0:FORA=0T031:FORB=0T07:VPOKENT+B*32+A,XX:XX=XX+1:NEXTB,A:RETURN
```



```
41Ø GOSUB28Ø:GOSUB3ØØ:RETURN
420 X=="This is a test to demonstrate how to change the SCREENS! ' ' show colum
       Notice how the (ENTER) message is confused by the change. ": GOSUB43Ø: GOSU
B2ØØ:RETURN
43Ø COLOR15: X=2: Y=1: FORN=1TOLEN(X$): LOCATEX*8, Y*8: PRINTMID$(X$, N, 1): LOCATEX*8, Y*
8:PRINT"H":X=X+1:IFX>31THENX=Ø:Y=Y+1
44Ø NEXT: RETURN
450 LOCATEO, 0: COLOR15: PRINT" Insert message here, not more than 40": PRINT: PRINT:
PRINT"Start message at right location":PRINT:GOSUB200:RETURN
46Ø REM Offset Print
47Ø DM=5:COLOR15,Ø,4:SCREEN1:LOCATE8,Ø:PRINT"Words are just PIXELS, O.K."
48Ø DEF FNX=25Ø-X:DEF FNY=Y+9:GOSUB55Ø
49Ø DEF FNX=25Ø-Y:DEF FNY=X:GOSUB55Ø
500 DEF FNX=250-X:DEF FNY=180-Y:GOSUB550
51Ø DEF FNX=Y+2Ø :DEF FNY=199-X:GOSUB55Ø
52Ø DEFFNX=16+X-Y:DEF FNY=9+Y+X:GOSUB55Ø
53Ø DEF FNX=X*2 :DEF FNY=5Ø+Y*2:GOSUB55Ø
54Ø GOSUB9ØØ:GOTO54Ø
55Ø FORX=ØT0175:FORY=ØT07
56Ø DO=POINT(X,Y):IFDO=ØGOTO58Ø
57Ø PSET(FNX,FNY),DO
58Ø NEXTY.X: RETURN
590 REM Colour inversion
600 DM=5:LOCATE8,80:PRINT"Which Screen to invert":COLOR4:PRINT" (1) Top":COLOR1:
PRINT" <2> Middle":COLOR14:PRINT" <3> Bottom":COLOR15:LOCATE8,152:PRINT" Hmmm...
?":COLOR1:GOSUB16Ø
61Ø GOSUB17Ø: IFA$=E$THENGOSUB91Ø
62Ø IFAV<10RAV>3GOTO61ØELSETZ=(AV-1)*2Ø48+CL
63Ø FORI=TZ TO TZ+2Ø47: J=VPEEK(I): MS=J\16:LS=JMOD16: JN=MS+LS*16: VPOKEI, JN: NEXT: G
OT061Ø
640 REM Inputs Routine
65Ø DM=4:LOCATE8,68:COLOR4:PRINT"This demonstration uses an input routine":PRINT
" for SCREEN 1. It follows most rules of
                                              LINEINPUT": PRINT" For a explanation
. list lines:"
66Ø PRINT" lines 67 - 89":GOSUB16Ø
67Ø XX=1:YY=17:LL=1:IM=Ø:SL=1:ML=29:FG=1:BG=14:GOSUB85Ø:X1=XX*8:Y1=YY*8:COLORFG,
BG: IS$="":GOSUB88Ø
68Ø PUTSPRITEØ, (X1+SL*8-1, Y1-2), 15, ABS(IM)
69Ø A$=INPUT$(1):IFA$=CR$GOTO82Ø
7ØØ IFA≢=E$THENGOSUB91Ø
71Ø IFA$=CE$ANDLL>ØTHENLL=SL:GOSUB88Ø
72Ø IFA$=CN$ANDLL>ØTHENSL=LL
73Ø IFA$=LC$THENSL=SL+(SL)1):IM=Ø
74Ø IFA==RC=THENSL=SL-(SL(ML):IM=Ø
75Ø IFA==BS=ANDSL>1THENSL=SL-1:GOSUB86Ø
760 IFA==IN=THENIM=NOTIM
77Ø IFA$=DL$ANDLL>SLTHENGOSUB86Ø:GOTO68Ø
78Ø IFA$<" "GOTO68Ø
79Ø IFIMTHENGOSUB89Ø
800 IS#(SL)=A#:A=SL:GOSUB870:SL=SL-(SL(ML):IFLL(SLTHENLL=SL-1
81Ø GOTO68Ø
82Ø IFLLTHENFORA=1TOLL: IS==IS=+IS=(A):NEXT
83Ø LINE(5,16Ø)-(255,191),BG,BF:LOCATE8,16Ø:PRINT"The string is: ":PRINT" → "IS$" ←
":PRINT"Press SPACEBAR for another example"
84Ø GOSUB17Ø:IFA$=E$THENGOSUB91ØELSEIFA$<>" "GOTO84ØELSEGOTO67Ø
85Ø SCREEN, Ø: SPRITE$ (Ø) = CHR$ (255) + STRING$ (7,129): SPRITE$ (1) = STRING$ (3,0) + CHR$ (25
```

5) +STRING\$(3,129) +CHR\$(255):RETURN

86Ø FORA=SLT03Ø:IS\$(A)=IS\$(A+1):GOSUB87Ø:NEXT:LL=LL-1:RETURN



87Ø LINE(X1+A\*8, Y1-1)-(X1+A\*8+7, Y1+9), BG, BF:LOCATEX1+A\*8, Y1:PRINTIS\$(A):RETURN

88Ø FORA=SLT03Ø:IS\$(A)=" ":GOSUB87Ø:NEXT:LL=LL-1:RETURN

89Ø FORA=3ØTOSL+1STEP-1:IS#(A)=IS#(A-1):GOSUB87Ø:NEXT:RETURN

900 A=INKEY=:IFA=<>E=THENRETURN

910 GOSUB850: GOSUB410: ONDMGOSUB120, 130, 140, 150, 110: GOSUB120: GOSUB100: GOSUB190: RE TURN 70

92Ø DATA 32,31,255,223,224,225,257,33

93Ø COLOR15,4,1

# SPECIAL CHARACTERS

In Mr. Dunnings Demonstration programs he uses arrows in his printing (  $\uparrow$   $\downarrow$   $\rightarrow$   $\leftarrow$  ). As my printer will not display them, or any graphic characters, while printing text, I draw them in by hand after.

I assume people can find them using the GRPH keys. However I have recieved many requests on how the arrows are typed while entering programs. I place the arrows on my Function keys and then use the keys like any normal key. The following 4 statements will do this for you.

KEY 1, CHR# (212)

KEY 2, CHR\$ (213)

KEY 3, CHR\$ (214)

KEY 4, CHR\$ (215)





#### DISK TURNOFF DELAY

To all you disk owners, are you sick of your disks taking a long time to turn off after they have been accessed. Well it's been annoying me ever since I have had them. All other disk systems I have seen turn off the disks a few seconds after they were accessed. NOT OURS they have to spin for hours (Close anyway) wearing floppy disks and the disk drive head out.

Now you can stop this with the following two methods:

#### S.V. BASIC DISKS

Run the following program. Dont forget to reset your computer after you have run the program otherwise you will see no difference.

10 CLEAR 1000

20 FIELD #0, 30 AS Z\$

3Ø A#=DSKI#(1,Ø,12)

4Ø MID#(A#, 2Ø, 1) = CHR#(5Ø)

5Ø MID#(A#, 21, 1) = CHR#(Ø)

6Ø LSET Z==LEFT=(A=,3Ø)

7Ø DSKO\$ 1,Ø,12

This program need only be run once on every BASIC disk you have and from then on you have a fast switch off installed.

#### CP/M BIOS

For all you CP/M programmers the following should be enough for you.

With SYSGEN & DDT get your BIOS into memory and at location 2744H in DDT or EDC4 absolute address change 21 Ø8 Ø7 to 21 32 ØØ.

If you are not up to doing that send a cp/m disk to me and I will do it for you (dont forget return postage). You can then SYSGEN from that disk.

NOTE: Copy will not work with this mod. It is not the fault of the Modification but a fault in COPY, which forgets to turn on the disk when it tries to access it. ??? (some one will fix it soon no doubt).



## PROGRAM OF MONTH

```
10 DEFINT A Z
2Ø CLEAR2ØØ:C=RND( TIME):UIDTH4Ø:SCREEN,Ø:DIMA#(13):DEFINTA,D:C=2Ø:C#="CREDITS #
"##"
3Ø GOSUB96Ø:GOTO5Ø
4Ø GOSUB1Ø1Ø
5Ø GOSUB111Ø
6Ø CLS:GOSUB15ØØ
7Ø PRINT"PAYOUTS: ":FORI=1T09:ONIGOT08Ø,9Ø,1ØØ,11Ø,12Ø,13Ø,14Ø,15Ø,16Ø
8Ø PRINTTAB(9) "HIGH PAIR - ";:GOTO17Ø
9Ø PRINTTAB(9) "TWO PAIR - ";:GOTO17Ø
100 PRINTTAB(9) "3 OF A KIND - ";:GOTO170
110 PRINTTAB(9) "STRAIGHT - ";:GOTO170
120 PRINTTAB(9) "FLUSH - ";:GOTO170
13Ø PRINTTAB(9) "FULL HOUSE ";:GOTO17Ø
14Ø PRINTTAB(9)"4 OF A KIND - ";:GOTO17Ø
15Ø PRINTTAB(9) "STRAIGHT FLUSH "::GOTO17Ø
160 PRINTTAB(9) "ROYAL FLUSH ";
17Ø PRINTTAB(26)USING"### TO 1";P(I 1):NEXTI
18Ø PRINT:PRINT:PRINT" PRESS [B] TO BET OR [D] TO DRAW"
19Ø F=Ø:FORQ=ØTO4:GOSUB127Ø:GOSUB13ØØ:NEXTQ
200 GOSUB1240: IFA="D"THEN240
21Ø IFA±()"B"THEN2ØØ
22Ø IFM)98THEN2ØØ
23Ø IFC>ØTHENC=C-1:M=M+1:GOSUB15ØØ:GOTO2ØØ
24Ø IFC=ØANDM=ØTHENEND
25Ø IFM=ØTHEN2ØØ
26Ø F=8:FORQ=ØTO4:GOSUB13ØØ:GOSUB139Ø:NEXT
27Ø LOCATE3,14:PRINT"[1]-[5] TO HOLD,[C]ANCEL OR [D]RAW"
28Ø GOSUB124Ø
29Ø IFA=="C"THENFORI=ØTO4:V(I)=Ø:NEXT:LOCATEØ,23:PRINTSTRING=(38," ");:GOTO28Ø
300 IFA="D"THEN340
31Ø IFA#<"1"ORA#>"5"THEN28Ø
33Ø V(A-1)=1:LOCATE2+(A-1) *8,23:PRINT"HELD";:GOTO28Ø
34Ø FORQ=ØTO4:IFV(Q)=ØTHENB(Q)=Q+1:F=Ø:GOSUB13ØØ
35Ø NEXT:FORI=1T05ØØ:NEXT
36Ø LOCATEØ, 23:PRINTSTRING≢(38, " ");:FORQ=ØTO4:IFV(Q)=ØTHENF=Ø:GOSUB114Ø:GOSUB11
9Ø:F=8:GOSUB13ØØ:GOSUB139Ø
370 NEXT
38Ø REM PUT CARDS IN ORDER
39Ø FORI=1T04:FORJ=ØT0I-1
400 IFA(J)>A(I)THENK=A(I):A(I)=A(J):A(J)=K
410 NEXTJ,I
420 REM CHECK FOR WINS
43Ø T=1:V=Ø
44Ø ONTGOSUB47Ø,5ØØ,54Ø,61Ø,64Ø
450 IFV=0THENT=T+1:IFT()6THEN440
46Ø GOTO67Ø
47Ø IFA(Ø)=A(1)ANDA(1)=A(2)ANDA(2)=A(3)THENV=1
48Ø IFA(1)=A(2)ANDA(2)=A(3)ANDA(3)=A(4)THENV=1
49Ø RETURN
500 IFA(0)=A(1)ANDA(1)=A(2)THENV=2:IFA(3)=A(4)THENV=V+1
```

```
510 IFA(1)=A(2)ANDA(2)=A(3)THENU=2
  52Ø IFA(2)=A(3)ANDA(3)=A(4)THENV=2:IFA(Ø)=A(1)THENV=V+1
  53Ø RETURN
 54Ø P=Ø:IFA(Ø)=A(1)THENP=P+1:N=A(Ø)
  55Ø IFA(1)=A(2)THENP=P+1:N=A(1)
  56Ø IFA(2)=A(3)THENP=P+1:N=A(2)
  57Ø IFA(3)=A(4)THENP=P+1:N=A(3)
  58Ø IFP=2THENV=4
  59Ø IFP=1AND(N)1ØORN=1)THENV=7
 600 RETURN
  61Ø IFD(Ø)=D(1)ANDD(1)=D(2)ANDD(2)=D(3)ANDD(3)=D(4)THENV=5:GOSUB64Ø
   62Ø IFV=6THENV=8
  63Ø RETURN
  64Ø IFA(Ø)+1=A(1)ANDA(1)+1=A(2)ANDA(2)+1=A(3)ANDA(3)+1=A(4)THENU=U+6
  65Ø IFA(Ø)=1ANDA(1)+A(2)+A(3)+A(4)=46THENY=6
  66Ø RETURN
  67Ø IFV>ØTHEN69ØELSEIFC=ØTHEN135Ø
  68Ø LOCATE7.23:PRINT"PRESS ANY KEY TO CONTINUE";:GOSUB124Ø:GOTO4Ø
  69Ø LOCATE3, 23: ONVGOTO7ØØ, 71Ø, 72Ø, 73Ø, 74Ø, 75Ø, 76Ø, 77Ø, 1Ø, 1Ø, 78Ø
  700 PRINT"FOUR OF A KIND";: E=P(6) *M:GOTO790
  710 PRINT"THREE OF A KIND":: E=P(2) *M:GOTO790
  72Ø PRINT"FULL HOUSE";:E=P(5)*M:GOTO79Ø
  73Ø PRINT"TWO PAIR";:E=P(1) *M:GOTO79Ø
  74Ø PRINT"FLUSH";: E=P(4) *M: GOTO 79Ø
  750 PRINT"STRAIGHT";: E=P(3) *M:GOTO790
  76Ø PRINT"HIGH PAIR";:E=M:GOTO79Ø
  770 PRINT"ROYAL FLUSH"::E=P(8) *M:GOTO790
  78Ø PRINT"STRAIGHT FLUSH";: E=P(7) *M:GOTO79Ø
  790 PRINT". YOU HAVE WON"E;
  800 LOCATEO, 14: PRINT"PRESS [C] TO COLLECT OR [D] TO DOUBLE UP"
  81Ø GOSUB124Ø
  82Ø IFA = "D" THEN 87Ø
  83Ø IFA#()"C"THEN81ØELSEI=Ø:B=C+E
  84Ø C=C+1:BEEP:I=I+1:GOSUB15ØØ
  85Ø IFI (2ØTHENFORJ=1T01ØØ:NEXTELSEIFI) 6ØTHENC=B:GOT04Ø
  86Ø IFC(BGOTO84ØELSE4Ø
  87Ø CLS:GOSUB15ØØ:LOCATE1,6:PRINT"PRESS [B] BIGGER OR [S] SMALLER THAN 8";
  88Ø Q=2:F=Ø:GOSUB127Ø:GOSUB13ØØ:GOSUB114Ø
  89Ø GOSUB124Ø
  900 IFA $ ( > "B" ANDA $ ( > "S" THEN 890
  910 F=8:GOSUB1300:GOSUB1390:LOCATE13.10:PRINT"YOU BET ";:IFA=="B"THENPRINT"BIGGE
  R"ELSEPRINT"SMALLER"
  92Ø IFA = "B"AND(A(2))80RA(2)=1)THEN95Ø
  93Ø IFA=="S"ANDA(2)(8THEN95Ø
  94Ø LOCATE9,11:PRINT"BAD LUCK!
                                    YOU LOST": IFC<1THEN135ØELSE68Ø
  95Ø LOCATE3,11:PRINT"CONGRATULATIONS! YOU HAVE WON"E*2:E=E*2:GOTO8ØØ
  960 REM TITLE & INITIALISE
  97Ø COLOR4,15,15:SCREEN2:LOCATE68,96:PRINT"POKER":FORI=1T03ØØØ:NEXT
  98Ø SCREENØ, Ø: CLS: LOCATE6, 10, Ø: PRINT "DO YOU WANT INSTRUCTIONS ?"
99Ø A==INKEY=:IFA=="Y"THENGOSUB1Ø3ØELSEIFA=<>"N"THEN99Ø
```

1000 FORQ=1TO13:READA#(Q):NEXT:FORQ=0TO8:READP(Q):NEXT

1Ø1Ø FORQ=ØTO4:A(Q)=Ø:B(Q)=Ø:D(Q)=Ø:V(Q)=Ø:NEXT:M=Ø

```
1030 RETURN
1030 REM INSTRUCTIONS
1040 CLS:PRINTTAB(15) "** P O K E R **"
1050 PRINT:PRINT:PRINT" This game is very simple to play. You start with "C" cre
dits and you bet as many as you like on each hand. You then draw the cards an
d select the cards you"
1060 PRINT want to hold. Then you draw cards again and you are told if you have
Won. ": PRINT: PRINT
1070 PRINT" If you win you have the choice to collect your winnings or take
a chance to double them by guessing whether a single card is bigger or smal
ler than 8 (you lose if it is an 8). Play continuesuntil you are out of credits"
1080 LOCATE10,23:PRINT"Press [ENTER] to begin";:
1090 GOSUB1240: IFA$<>CHR$(13) THEN1090
1100 CLS:RETURN
1110 REM SELECT 5 CARDS
112Ø FORQ=ØTO4:GOSUB114Ø:GOSUB119Ø:NEXTQ
113Ø RETURN
1140 REM CARD SELECTION
115Ø A(Q)=RND(TIME) *13+1
116Ø D(Q)=RND(TIME) *8+1: IFD(Q) >4THEND(Q)=D(Q)/2
117Ø B(Q)=A(Q)+D(Q)*2Ø
118Ø RETURN
1190 REM CARD CHECK
1200 FORI=0T04
121Ø IFI=QTHEN123Ø
122Ø IFB(I)=B(Q)THENGOSUB115Ø: I=4:NEXT:GOTO1200
123Ø NEXTI:RETURN
1240 REM INKEY ROUTINE
125Ø A==INKEY=:IFA==""THEN125Ø
126Ø RETURN
1270 REM DRAW CARD
128Ø LOCATE1+0*8,16:PRINT" ":FORL=17T021:LOCATE1+0*8,L:PRINT"
129Ø LOCATE1+Q*8,22:PRINT" ":RETURN
1300 REM FILL IN CARD
131Ø FORI=17T021:LOCATE2+Q*8,I:IFF=8THEN133Ø
1320 PRINT"%%%";:GOTO1340
133Ø PRINT"
134Ø NEXTI:RETURN
135Ø REM FINISH
1360 LOCATEO, 13: PRINT TOO BAD! YOU MIGHT HAVE BETTER LUCK NEXTTIME. DO YOU WANT
ANOTHER GO ?
137Ø A==INKEY=:IFA=="Y"THENRUNELSEIFA=<>"N"THEN137Ø
 138Ø PRINT"GOODBYE":END
 139Ø REM PRINT THE CARD VALUE
 1400 OND(Q)GOTO1420,1440,1460,1480
                                  3 (HCHPT)
 141Ø RETURN
 142Ø LOCATE2+Q*8,17:PRINTUSING"\\♥;";A$(A(Q)):LOCATE2+Q*8,21:IFA(Q)<>1ØTHENPRINT
 USING"; !";A$(A(Q))ELSEPRINT"; $10"
                                    - (SPADE)
 143Ø RETURN
 1440 LOCATE2+Q*8,17:PRINTUSING"\\ P";A$(A(Q)):LOCATE2+Q*8,21:IFA(Q)<>10THENPRINT
USING"0 !";A$(A(Q))ELSEPRINT"$ 10"
                                    ( cub)
 145Ø RETURN
 1460 LOCATE2+Q*8,17:PRINTUSING"\\ *";A$(A(Q)):LOCATE2+Q*8,21:IFA(Q)<>10THENPRINT
USING" F !"; A$ (A(Q)) ELSEPRINT " 10"
                                    Diagood)
 147Ø RETURN
 1480 LOCATE2+0*8,17:PRINTUSING" \\ & "; A$(A(Q)):LOCATE2+Q*8,21:IFA(Q) <>10THENPRINT
 USING"6 !";A$(A(Q))ELSEPRINT" ♦ 10"
```

149Ø RETURN



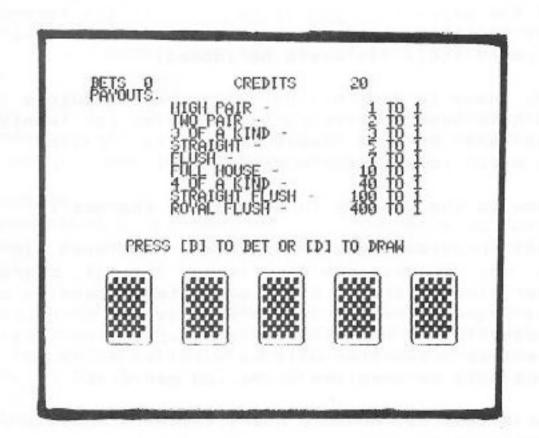
1500 C\$= "CREDITS ###, ###": IFC>999999! THENC=C-10000000#

1510 LOCATEO, 0: PRINTUSING "BETS ##"; M; : PRINTTAB (25) USINGC#; C

152Ø RETURN

1530 DATAA, 2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K, 1, 2, 3, 5, 7, 10, 40, 100, 400

#### SAMPLE SCREEN





#### THE LIBRARY & THE LIBRARIAN

Over the past couple of months some changes have needed to be made to the organizational side of the Users' Group and one of the areas changed has been the Program Library. From the inception of the group the Editor has been trying to look after the newsletter, the group as a whole, and the Library....a not too difficult task if you had four hands and unlimited time with no other calls on your services.

Your editor isn't a self-employed millionaire computer freak and so has to work to feed the family....said work taking up the usual time and family and other commitments making large inroads into the rest of the day....oh woe is me! All the foregoing simply put meant that 'Editor' looked round for someone to take some of the weight and yours truly was where he looked.

My name is Jim Collins, I've had computers for three years or so and have been an electronics hobbyist for twenty five years. I'm married and have a family and like 'Editor' I have other commitments which compete for my free time.

Now to the Library functions and charges :-

Any program which has been published in any of the newsletters may be had from the library free of charge. You may supply either blank disks or blank cassettes depending on your system, or you may request the library to provide the programs you want on disk or cassette and have the library supply the media. Computer grade leaderless cassettes will be supplied at \$3.00 per cassette. Quality disks will be supplied at \$6..00 per disk

As a security measure where cassette loads are required and space permits each program will be recorded twice...if you can't load one for whatever cause then you have a chance with the second or security load. Programs on disk will be supplied in standard format. All cassettes and disks will be double checked and care packed.....when they leave here they will be in good condition.....we have to depend on Australia Post and their system to get them to you without damage. If you have any problems please send straight back with an explanation of what you found wrong etc.

#### PROGRAMS FOR SALE.

As often as possible we will publish an updated list of those programs submitted by group members for sale through the library. (last list in issue 1-10 for July,84). Prices shown are the amounts asked for by the program authors plus small amount to cover copying charges, postage and handling. The group does not profit from these sales. In all cases every effort will be made to get your requirements away to you within forty eight hours. I ask that you



remember two things when making use of the library services. It's purely voluntary and of course must be fitted in with all my normal activities and must share computer time with other projects. Second thing is that being human I can and do make mistakes.....I wont mind you telling me that I've made a booboo if you do it nicely.

You will also note that we can provide some of the Public Domain Software for CP/M and only make a small charge for copying and pack and post. If you have any CP/M programs that you would like to share with other group users please submit them for inclusion in the library list. I refer here to Public Domain Software only, not commercially available software for which the author is rightfully entitled to a fair return. If you have written any CP/M Programs and want to sell them through the group please submit them for evaluation and don't forget to indicate what return you expect per copy sold.

Within the limits expressed above I would also be interested in helping any group member who has any of the following for sale or possible swap.

HARDWARE ITEMS Commercial or home-brew...(must be in working order with handbooks etc, or there may be someone willing to purchase defective equipment items for whatever purpose).

#### COMMERCIAL PROGRAMS

You may have purchased a program for which you have no further use and now wish to sell or swap. (originals only please as selling copies is just not on).

Finally, a word to all.......Make use of the facilities offered and by all means let us know if you have anything to contribute. Address all requests for Library services to the address shown below and any other enquiries to the Editor at the Group address published.

Address for Library direct :-

1 Conrad Avenue, George Town. 7253 Tasmania.