



Willie says... There's only  
One group nuttier than me...  
the "CoCo-NuTs"

The  
"ATLANTA COMPUTER  
SOCIETY"

VOLUME 1 #8

NOV. 1994

-----\*  
PRESIDENT'S PRINTOUT  
by Ken Fish

Well folks, due to unforeseen circumstances, I don't have much of an article for you this month. As those of you who attend the meetings know, I've been unable to even attend lately due to some major problems at my homestead. Everything from car problems to other family matters have plagued our family. The good news is it looks like the end is in sight even if it still seems a looong way off!!!).

I did this program a long time ago when the Georgia Lottery was first starting up. Now with Russ Keller's fine program in Basic09 I thought that maybe those of you who run RSDOS instead of OS9 might be interested in it. There is also a challenge to go with it! You see, I NEVER claimed to be much of a programmer, so I know some of you industious types can make some changes and refinements to this basic program and have my permission (and hopes) to do so. Send any revisions to the newsletter by way of the ACS BBS or mail and we'll get Russ to print them. Then all we have to do is wait for the jackpot to get up high again and hope for the best. Good Luck!

Til Later

-----\*  
EDITOR'S ECHO  
by Russ Keller

This month there are articles by Ken Fish and Carl England. I downloaded Shell+ 2.2a from the board. I'll put it into my CMDS directory tomorrow and test it out. I'll try to review some games from the board next month also.

Carl has the third installment of his series on Assembly language programming. I'll make up some modules using Basic09 that can be incorporated into basic programs. I'll give illustrations incorporating the modules in programs so you can do the same. Carl stated "Do not re-invent the wheel", but you can improve the wheel or use fewer parts.

Till next month.

-----\*

LOTTERY

By Ken Fish

```
10 A=RND(46)
20 B=RND(46)
30 IF B=A THEN 20 ELSE 40
40 C=RND(46)
50 IF C=A OR C=B THEN 40 ELSE 60
60 D=RND(46)
70 IF D=A OR D=B OR D=C THEN 60 ELSE 80
80 E=RND(46)
90 IF E=D OR E=C OR E=B OR E=A THEN 80 ELSE 100
100 F=RND(46)
110 IF F=E OR F=D OR F=C OR F=B OR F=A THEN 100 ELSE 120
120 PRINT A
130 PRINT B
140 PRINT C
150 PRINT D
160 PRINT E
170 PRINT F
180 INPUT "DO YOU WANT MORE NUMBERS? (Y/N)"; A$
190 IF A$= "Y" THEN 10 ELSE 200
200 IF A$= "N" THEN END ELSE 180
```

Two lines were corrected by yours truly.

-----\*

By Carl England

Modular Programming - Part III

User Interface

This month's module will be a user interface. Because of its length, I will only include the module. Next month I will explain how to use this module--also I will include a short program to test this module. (To use this module, you must have the previous three modules: CLH, PRINT and DISKIO).

```
00100 *****
00110 * *
00120 *          MODULE: DIR *
00130 * *
00140 * DISPLAYS DIRECTORY, SELECT A FILE WITH ARROW *
00150 *          KEYS *
00160 * *
00170 * MODULES CALLED: DISKIO, CLH, PRINT *
00180 * *
```

```

00190 * INPUT CONDITIONS: SDRIVE = SOURCE DRIVE *
00200 * EXIT CONDITIONS : REGISTER X POINTS TO FILE *
00210 * REGISTER A = ENTER OR SPACE *
00220 * REGISTERS B & U MODIFIED *
00230 * *
00240 *****
00250
00260 DIRBUF EQU $E00 DIRECTORY BUFFER
00270 DIR LDD #$1103 TRACK 17, SECTOR 3
00280 LDU #DIRBUF
00290 DIR0 JSR DSKIN GET A SECTOR
00300 LDX #$400
00310 DIR01 LDA ,X KILLED FILE?
00320 BEQ DIR03 IF YES--SKIP IT
00330 INCA END OF DIRECTORY?
00340 BEQ DIR1 IF YES--EXIT
00350 LDB #16 GET 16 BYTES
00360 DIR02 LDA ,X+ GET A BYTE
00370 STA ,U+ STORE IN BUFFER
00380 DECB FINISHED?
00390 BNE DIR02 IF NO--LOOP
00400 BRA DIR04 DON'T SKIP FILE
00410 DIR03 LEAX 16,X SKIP FILE
00420 DIR04 LEAX 16,X SKIP UNUSED DATA
00430 CMPX #$4FF END OF SECTOR?
00440 BLT DIR01 IF NO--LOOP
00450 LDD 236 GET TRACK & SECTOR
00460 INCB NEXT SECTOR
00470 CMPB #19 LAST SECTOR?
00480 BNE DIR0 IF NO--LOOP
00490 DIR1 STU DIR5 BUFFER END
00500 CLR DIR6 SET PAGE TO 0
00510 DIR11 LDU #DIRBUF BUFFER START
00520 CMPU DIR5 EMPTY BUFFER?
00530 BNE DIR2 IF NO--CONTINUE
00540 JSR CLH ELSE CLEAR THE SCREEN
00550 LDU #DIR8 GET TEXT
00560 CLRA DEVICE = SCREEN
00570 JSR PRINT PRINT MESSAGE
00580 DIR12 JSR [$A000] GET A KEY
00590 CMPA #3 BREAK?
00600 BEQ DIR IF YES--START OVER
00610 CMPA #48 LESS THAN ZERO?
00620 BLT DIR12 IF YES--LOOP
00630 CMPA #51 MORE THAN 3?
00640 BGT DIR12 IF YES--LOOP
00650 DIR13 SUBA #48 CONVERT ASCII DATA
00660 STA SDRIVE NEW SOURCE DRIVE
00670 BRA DIR START OVER
00680 DIR2 LDB DIR6 GET PAGE
00690 DIR21 DECB CORRECT PAGE?
00700 BMI DIR22 IF YES--EXIT
00710 LEAU $200,U NEXT PAGE

```

00720		BRA	DIR21	LOOP
00730	DIR22	STU	DIR7	CURRENT PAGE
00740		JSR	CLH	CLEAR THE SCREEN
00750	DIR23	LDX	\$88	GET CURSOR POSITION
00760		LEAX	1,X	PLUS 1
00770		STX	\$88	SAVE IT
00780		LDB	#8	FILE NAME LENGTH
00790		BSR	DIR33	PRINT FILE NAME
00800		LDA	#\$2E	". "
00810		JSR	[\$A002]	SEND TO SCREEN
00820		LDB	#3	EXTENSION LENGTH
00830		BSR	DIR33	PRINT EXTENSION
00840		LDD	\$88	GET CURSOR POSITION
00850		CMPD	#\$5F0	END OF SCREEN?
00860		BGE	DIR25	IF YES--EXIT
00870		LDD	#\$2003	3 SPACES
00880	DIR24	JSR	[\$A002]	SEND TO SCREEN
00890		DECB		FINISHED?
00900		BNE	DIR24	IF NO--LOOP
00910		LEAU	5,U	SKIP REST OF DIRECTORY DATA
00920		CMPU	DIR5	END OF BUFFER?
00930		BLT	DIR23	IF NO--LOOP
00940	DIR25	LDU	#\$400	BEGINNING OF SCREEN
00950		LDX	DIR7	CURRENT BUFFER POSITION
00960	DIR26	LDD	#\$3E3C	"><"
00970		STA	,U	LEFT POINTER
00980		STB	13,U	RIGHT POINTER
00990	DIR3	JSR	[\$A000]	READ KEYBOARD
01000		CMPA	#\$5E	UP ARROW?
01010		BEQ	DIR40	IF YES--PROCESS IT
01020		CMPA	#\$A	DOWN ARROW?
01030		BEQ	DIR41	IF YES--PROCESS IT
01040		CMPA	#8	LEFT ARROW?
01050		BEQ	DIR42	IF YES--PROCESS IT
01060		CMPA	#9	RIGHT ARROW?
01070		BEQ	DIR43	IF YES--PROCESS IT
01080		CMPA	#\$5F	SHIFT UP ARROW?
01090		LBEQ	DIR44	IF YES--PROCESS IT
01100		CMPA	#\$5B	SHIFT DOWN ARROW
01110		LBEQ	DIR45	IF YES--PROCESS IT
01120		CMPA	#3	BREAK?
01130		LBEQ	DIR	IF YES--START OVER
01140		CMPA	#13	ENTER?
01150		BNE	DIR31	IF NO--CONTINUE
01160		RTS		EXIT--PASS PARAMETERS
01170	DIR31	CMPA	#32	SPACE?
01180		BNE	DIR32	IF NO--CONTINUE
01190		RTS		EXIT--PASS PARAMETERS
01200	DIR32	CMPA	#48	LESS THAN ZERO?
01210		BLT	DIR3	IF YES--LOOP
01220		CMPA	#51	MORE THAN THREE?
01230		BGT	DIR3	IF YES--LOOP
01240		LBRA	DIR13	CHANGE DRIVE AND START OVER

```

01250 *****
01260 *
01270 * SUBROUTINE TO PRINT FILE NAME AND EXTENSION *
01280 *
01290 *****
01300 DIR33 LDA ,U+ GET A BYTE
01310 JSR [$A002] SEND TO SCREEN
01320 DECB FINISHED?
01330 BNE DIR33 IF NO--LOOP
01340 RTS ELSE RETURN
01350 *****
01360 *
01370 * SUBROUTINE TO ERASE SCREEN POINTERS *
01380 *
01390 *****
01400 DIR34 LDB #$60 BLANK SPACE
01410 STB ,U ERASE LEFT POINTER
01420 STB 13,U ERASE RIGHT POINTER
01430 RTS RETURN
01440 *****
01450 *
01460 * UP ARROW *
01470 *
01480 *****
01490 DIR40 BSR DIR34 ERASE POINTERS
01500 CMPU #$410 TOP OF SCREEN?
01510 BLE DIR26 IF YES--EXIT
01520 LEAU -32,U MOVE UP ONE
01530 LEAX -32,X BACK TWO FILES
01540 BRA DIR26 EXIT
01550 *****
01560 *
01570 * DOWN ARROW *
01580 *
01590 *****
01600 DIR41 BSR DIR34 ERASE POINTERS
01610 CMPU #$5E0 BOTTOM OF SCREEN?
01620 BGE DIR26 IF YES--EXIT
01630 TFR X,D DATA TO ACCUMULATOR
01640 ADDD #32 FORWARD TWO FILES
01650 CMPD DIR5 END OF BUFFER?
01660 BGE DIR26 IF YES--EXIT
01670 LEAU 32,U MOVE DOWN
01680 TFR D,X SAVE NEW DATA
01690 BRA DIR26 EXIT
01700 *****
01710 *
01720 * LEFT ARROW *
01730 *
01740 *****
01750 DIR42 BSR DIR34 ERASE POINTERS
01760 CMPU #$400 END OF SCREEN?
01770 LBQ DIR26 IF YES--EXIT

```

```

01780      LEAU      -16,U   MOVE LEFT
01790      LEAX      -16,X   BACK ONE FILE
01800      LBRA      DIR26   EXIT
01810 *****
01820 *
01830 *          RIGHT ARROW
01840 *
01850 *****
01860 DIR43  BSR      DIR34   ERASE POINTERS
01870      CMPU      #$5F0   BEGINNING OF SCREEN?
01880      LBEQ      DIR26   IF YES--EXIT
01890      TFR       X,D     DATA TO ACCUMULATOR
01900      ADDD     #16     NEXT FILE
01910      CMPD     DIR5     END OF BUFFER?
01920      LBGE     DIR26   IF YES--EXIT
01930      LEAU     16,U    MOVE RIGHT
01940      TFR      D,X     SAVE DATA
01950      LBRA     DIR26   EXIT
01960 *****
01970 *
01980 *          SHIFT UP ARROW
01990 *
02000 *****
02010 DIR44  LDA      DIR6    PAGE 0?
02020      LBEQ     DIR3    IF YES--EXIT
02030      DECA     PAGE - 1
02040      STA      DIR6    SAVE PAGE
02050      LBRA     DIR11   LOOP
02060 *****
02070 *
02080 *          SHIFT DOWN ARROW
02090 *
02100 *****
02110 DIR45  LDD      DIR7    CURRENT POSITION
02120      ADDD     #$200   ADD A PAGE
02130      CMPD     DIR5    BEYOND END OF BUFFER?
02140      LBGE     DIR3    IF YES--EXIT
02150      INC      DIR6    PAGE + 1
02160      LBRA     DIR11   LOOP
02170 DIR5   RMB      2      BUFFER END
02180 DIR6   RMB      1      PAGE NUMBER
02190 DIR7   RMB      2      BUFFER CURRENT POSITION
02200 DIR8   FCC      /SOURCE DISK EMPTY!/
02210      FCB      0

```

'till next month



Atlanta Computer Society  
P.O. Box 80694  
Atlanta, Ga. 30366

ALLEN HUFFMAN  
P. O. BOX 152442  
LUFKIN TX 75915

ADDRESS CORRECTION REQUESTED

OFFICERS 1995

PRESIDENT	Ken Fish	439-5117
VICE PRESIDENT	Newton White	325-5348
EDITOR-TREASURER	Russ Keller	436-5094
SECRETARY	Alan Dages	469-5111
CLUB LIBRARIAN	Terry Dodson	463-1803
ACS BBS		636-2991

Next Meeting

November 22, 1994 Shoney's Jimmy Carter Blvd. Norcross  
December 20, 1994 Shoney's So. Cobb Dr. Smyrna  
December 27, 1994 Shoney's Jimmy Carter Blvd. Norcross