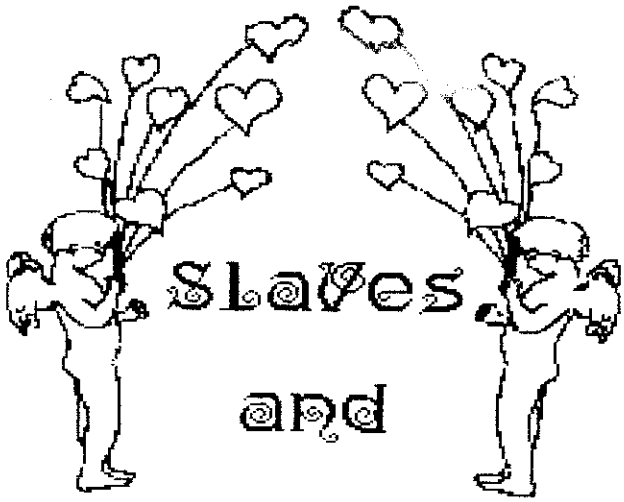

Slaves and OTTUG NEWSLETTER

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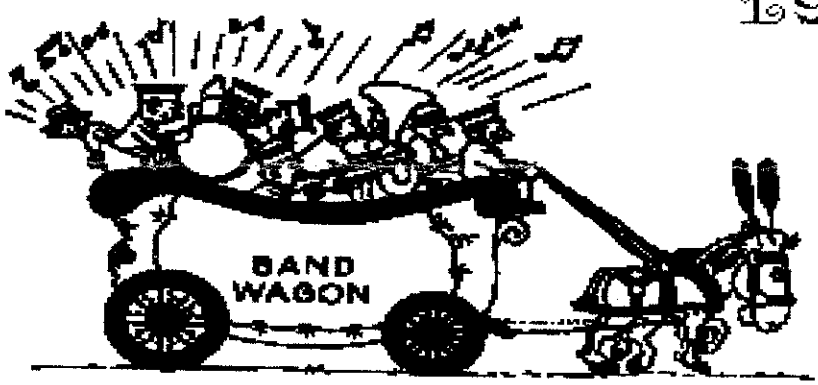


HI ! HO !

HI ! HO !

WE'RE ON OUR WAY

FEST WEST HO!HO!

HERE WE GO HO!HO!

PHOENIX NEXT STOP!!!!!

CAN I GO

CAN I GO

PLEEESEE!!

WHAT'S HAPPEN'

by Joe Masarone

Well how did you enjoy the BIG game? Tough. SUPER!! O.K. enough already. This article writing is pretty tough. Not only am I committed to doing one every month I have to compose it one month ahead of publication. This means (to you people reading this before your first cup of coffee) that today is January 15th and this Newsletter doesn't go out till mid-February. The SUPER Bowl hasn't been played yet and our Group (TI SLaVes) meeting for January is this saturday.

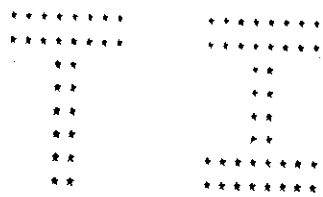
So now that you know my predicament should I say that last month's meeting went SUPER! Sure [illegible] not jinx the whole thi[illegible] Mel Bragg's demo on PagePro F/X went smoothly. (or did he forget to bring a printer) Steve Richarson's piece on on 3-D World was extraordinary (or should I extrapolate and say it was extraterrestrial because his coordinate placement was out of this world (or field of view and took two hours to show us a 3-D box rotating!) Just kidding guys I'm sure you did fine.

Well this month's meeting brings us back to the SUPER (again) Bowl. Richard Phillips has refined his program, "Best Bets" Football predictor. The program selected the Redskins over the Bills by 6-and-a-half points. 46 points. He will demo his program and offer it to all interested parties. For those of you unable to travel to Salt Lake City you can obtain a copy by writing the Editor and by sending a SASM *.

Rich said his program foresaw the quarter-finals and the semi-finals accurately. It did, "really well this season." Plan on coming to see BEST BETS, Rich's for Skins' program. (bad joke. But I couldn't resist!)

Alright. Half of our meeting is set. The other half is a surprise. I truely mean this because I haven't had a volunteer yet. Some one will turn up soon or YOU may get drafted!.

* SASM = Self Addressed Stamped Mailer.



Decimal/hex conversion charts

This chart converts hex numbers from 0 to FF to decimal and vice versa

Hex to decimal
To convert a hex number to decimal read along the row for the first hex digit in your hex number and down the column for the second hex digit. The number where the row and column meet is the decimal equivalent for your hex number, e.g. hex A1 is decimal 161.

Decimal to hex
To convert a decimal number to hex, find the decimal number in the chart. Then read back along the row for the first hex digit and up the column for the second hex digit e.g. 154 is 9A.

First hex digit \ Second hex digit	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
3	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
4	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
5	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
6	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
7	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
8	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
9	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
A	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
B	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
C	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
D	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
E	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
F	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255

Converting addresses
To use the chart to convert hex addresses, look up the decimal equivalent for the first pair of digits in the address. This is the page number. Then look up the decimal equivalent for the second pair of digits to find the position on the page. Multiply the page number by 256 and add the position on the page.

Two's complement conversion chart

This chart gives the two's complement in hex of decimal numbers from −1 to −128. To convert a number to two's complement, find the number in the chart, then read along the row for the first hex digit and up the column for the second digit.

First hex digit \ Second hex digit	F	E	D	C	B	A	9	8	7	6	5	4	3	2	1	0
F	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16
E	-17	-18	-19	-20	-21	-22	-23	-24	-25	-26	-27	-28	-29	-30	-31	-32
D	-33	-34	-35	-36	-37	-38	-39	-40	-41	-42	-43	-44	-45	-46	-47	-48
C	-49	-50	-51	-52	-53	-54	-55	-56	-57	-58	-59	-60	-61	-62	-63	-64
B	-65	-66	-67	-68	-69	-70	-71	-72	-73	-74	-75	-76	-77	-78	-79	-80
A	-81	-82	-83	-84	-85	-86	-87	-88	-89	-90	-91	-92	-93	-94	-95	-96
9	-97	-98	-99	-100	-101	-102	-103	-104	-105	-106	-107	-108	-109	-110	-111	-112
8	-113	-114	-115	-116	-117	-118	-119	-120	-121	-122	-123	-124	-125	-126	-127	-128

Doing conversions on a calculator
When you do conversions on a calculator the calculator displays the remainder as a decimal number. For example, if you are converting decimal 134 to hex you divide by 16 then convert the answer and remainder to hex digits. A calculator would give you the answer as 8.375

To convert the remainder to a whole number you subtract the number before the decimal point, then multiply by the number you divided by

8.375 − 8 = 0.375 × 16 = 6

So 134 ÷ 16 = 8 remainder 6 therefore decimal 134 is 86 in hex

TI KEY/CHARACTER CODES

KEY	ASC	HEX	NAME
	0	>00	POL marker
FCTN 7	1	>01	AID
FCTN 4	2	>02	CLEAR
FCTN 1	3	>03	DELete
FCTN 2	4	>04	INSert
FCTN =	5	>05	QUIT
FCTN 8	6	>06	REDO
FCTN 3	7	>07	ERASE
FCTN S	8	>08	Left Arrow
FCTN D	9	>09	Right Arrow
FCTN X	10	>0A	Down Arrow
FCTN E	11	>0B	Up Arrow
FCTN 6	12	>0C	PROC'D
ENTER	13	>0D	ENTER
FCTN 5	14	>0E	BEGIN
FCTN 9	15	>0F	BACK
	16	>10	
	17	>11	
	18	>12	
	19	>13	
	20	>14	
	21	>15	
	22	>16	
	23	>17	
	24	>18	
	25	>19	
	26	>1A	
	27	>1B	ESC
	28	>1C	
	29	>1D	
	30	>1E	Cursor
	31	>1F	Edge
Space	32	>20	Space
!	33	>21	
"	34	>22	
#	35	>23	
$	36	>24	
%	37	>25	
&	38	>26	
'	39	>27	
(	40	>28	
)	41	>29	
*	42	>2A	
+	43	>2B	
,	44	>2C	
-	45	>2D	
.	46	>2E	
/	47	>2F	
0	48	>30	
1	49	>31	
2	50	>32	
3	51	>33	
4	52	>34	
5	53	>35	
6	54	>36	
7	55	>37	
8	56	>38	
9	57	>39	
:	58	>3A	
;	59	>3B	
<	60	>3C	
=	61	>3D	
>	62	>3E	
?	63	>3F	

KEY	ASC	HEX	NAME
@	64	>40	
A	65	>41	
B	66	>42	
C	67	>43	
D	68	>44	
E	69	>45	
F	70	>46	
G	71	>47	
H	72	>48	
I	73	>49	
J	74	>4A	
K	75	>4B	
L	76	>4C	
M	77	>4D	
N	78	>4E	
O	79	>4F	
P	80	>50	
Q	81	>51	
R	82	>52	
S	83	>53	
T	84	>54	
U	85	>55	
V	86	>56	
W	87	>57	
X	88	>58	
Y	89	>59	
Z	90	>5A	
[	91	>5B	
\	92	>5C	
]	93	>5D	
^	94	>5E	
_	95	>5F	
`	96	>60	
a	97	>61	
b	98	>62	
c	99	>63	
d	100	>64	
e	101	>65	
f	102	>66	
g	103	>67	
h	104	>68	
i	105	>69	
j	106	>6A	
k	107	>6B	
l	108	>6C	
m	109	>6D	
n	110	>6E	
o	111	>6F	
p	112	>70	
q	113	>71	
r	114	>72	
s	115	>73	
t	116	>74	
u	117	>75	
v	118	>76	
w	119	>77	
x	120	>78	
y	121	>79	
z	122	>7A	
{	123	>7B	
|	124	>7C	
}	125	>7D	
~	126	>7E	
FCTN V	127	>7F	del

KEY	ASC	HEX	NAME
CTRL ,	128	>80	null
CTRL A	129	>81	ELSE
CTRL B	130	>82	::
CTRL C	131	>83	!
CTRL D	132	>84	IF
CTRL E	133	>85	GO
CTRL F	134	>86	GOTO
CTRL G	135	>87	GOSUB
CTRL H	136	>88	RETURN
CTRL I	137	>89	DEF
CTRL J	138	>8A	DIM
CTRL K	139	>8B	END
CTRL L	140	>8C	FOR
CTRL M	141	>8D	LET
CTRL N	142	>8E	BREAK
CTRL O	143	>8F	UNBREAK
CTRL P	144	>90	TRACE
CTRL Q	145	>91	UNTRACE
CTRL R	146	>92	INPUT
CTRL S	147	>93	DATA
CTRL T	148	>94	RESTORE
CTRL U	149	>95	RANDOMIZE
CTRL V	150	>96	NEXT
CTRL W	151	>97	READ
CTRL X	152	>98	STOP
CTRL Y	153	>99	DELETE
CTRL Z	154	>9A	REM
CTRL .	155	>9B	ON
CTRL ;	156	>9C	PRINT
CTRL =	157	>9D	CALL
CTRL 8	158	>9E	OPTION
CTRL 9	159	>9F	OPEN
	160	>A0	CLOSE
	161	>A1	SUB
	162	>A2	DISPLAY
	163	>A3	IMAGE
	164	>A4	ACCEPT
	165	>A5	ERROR
	166	>A6	WARNING
	167	>A7	SUBEXIT
	168	>A8	SUBEND
	169	>A9	RUN
	170	>AA	LINPUT
	171	>AB	
	172	>AC	
	173	>AD	
	174	>AE	
	175	>AF	
CTRL 0	176	>B0	THEN
CTRL 1	177	>B1	TO
CTRL 2	178	>B2	STEP
CTRL 3	179	>B3	.
CTRL 4	180	>B4	;
CTRL 5	181	>B5	:
CTRL 6	182	>B6	)
CTRL 7	183	>B7	(
FCTN ,	184	>B8	&
FCTN .	185	>B9	
FCTN /	186	>BA	OR
CTRL /	187	>BB	AND
	188	>BC	XOR
FCTN ;	189	>BD	NOT
FCTN 8	190	>BE	=
FCTN H	191	>BF	<

KEY	ASC	HEX	NAME
FCTN J	192	>C0	)
FCTN K	193	>C1	+
FCTN L	194	>C2	-
FCTN M	195	>C3	*
FCTN N	196	>C4	/
FCTN Q	197	>C5	'
FCTN Y	198	>C6	
	199	>C7	flag quoted
	200	>C8	flag unquoted
	201	>C9	flag line on
	202	>CA	EOF
	203	>CB	ABS
	204	>CC	ATN
	205	>CD	COS
	206	>CE	EXP
	207	>CF	INT
	208	>D0	LOG
	209	>D1	SGN
	210	>D2	SIN
	211	>D3	SQR
	212	>D4	TAN
	213	>D5	LEN
	214	>D6	CHR$
	215	>D7	RND
	216	>D8	SEG$
	217	>D9	POS
	218	>DA	VAL
	219	>DB	STR$
	220	>DC	ASC
	221	>DD	PI
	222	>DE	REC
	223	>DF	MAX
	224	>E0	MIN
	225	>E1	RPT$
	226	>E2	
	227	>E3	
	228	>E4	
	229	>E5	
	230	>E6	
	231	>E7	
	232	>E8	NUMERIC
	233	>E9	DIGIT
	234	>EA	UALPHA
	235	>EB	SIZE
	236	>EC	ALL
	237	>ED	USING
	238	>EE	BEEP
	239	>EF	ERASE
	240	>F0	AT
	241	>F1	BASE
	242	>F2	
	243	>F3	VARIABLE
	244	>F4	RELATIVE
	245	>F5	INTERNAL
	246	>F6	SEQUENTIAL
	247	>F7	OUTPUT
	248	>F8	UPDATE
	249	>F9	APPEND
	250	>FA	FIXED
	251	>FB	PERMANENT
	252	>FC	TAB
	253	>FD	#
	254	>FE	VALIDATE
	255	>FF	EOF marker

COURTESY OF: Jim Swedlow Author of "SIDE*PRINT" & "XB*TOOLS"

TEX TALKER

By Ed Machonis
QB-99ers, Bayside, NY

One of the great features of our computer, too often overlooked, is speech. The TI can still talk circles around most other computers. Yet few User Groups take advantage of this feature when demonstrating the TI at Malls and Fairs where other computers are also being shown. I can tell you from experience, speech can be a real crowd stopper.

Last year when the QB-99ers were asked to put on an exhibit at the college, we decided to show off the 4A's speech capabilities. I wrote a little extended basic program which performed the same way that TEX TALKER does but used the Text To Speech disk. It worked fine and did stop whoever happened to wander down to the sub-sub basement where we were located. The only problem, if we wanted to show something else, subsequent reload of the Text To Speech files took forever and a day.

TEX TALKER has since been rewritten in console basic so that the Terminal Emulator module can be used instead of Text To Speech. A speech synthesizer is also required, as with Text To Speech.

Using the program is quite simple. With the Terminal Emulator module plugged in, select TI Basic. Type OLD DSKn.TEXTALKER. At the cursor prompt, type RUN. The program will read the first DATA statement, display it on screen and speak it. If you press ENTER, the speech will be repeated. If you enter a period, the next DATA statement will be read, displayed and spoken.

At any time, you can type in anything you or the crowd desires and it will be spoken. It's a good idea to have the keyboard positioned so that onlookers may use it and interact with the computer. Again, pressing enter will cause the last speech to be repeated.

Enter your own DATA statements, using commas for short pauses and a period for longer ones. The use of commas requires that each DATA statement be enclosed in quotes. Be sure the last DATA statement is ZZZ.

```
90 REM  **** TEX TALKER ****
   By Ed Machonis, QB-99ers
Requires TERMINAL EMULATOR
MODULE & SPEECH SYNTHESIZER

100 OPEN #1:"SPEECH",OUTPUT

110 READ A$

120 IF A$="ZZZ" THEN 130 ELS
E 150

130 RESTORE

140 GOTO 110

150 PRINT !!!!!!!!A$!!!!!!!!
!!

160 GOTO 190

170 IF B$="" THEN 190

180 A$=B$

190 PRINT #1:A$

200 INPUT B$

210 IF B$="." THEN 110 ELSE
170

220 DATA "HELLO. I, AM A TEX
IS INSTRUMENTS T I 99, 4A CO
MPUTER.  I KNOW HOW TO TALK,
 BUT SUM PEOPLE THINK I, HAV
E. A FUNNEE ACCENT. "

230 DATA "SUM COMPUTERS CANT
 TALK. WE CALL THEM. DUMB. C
OMPUTERS. . YOU CAN CALL ME,
 TEX. "

240 DATA "THE, DUMB, COMPUTE
RS SAY I TALK JERKEE, BECAUS
E I, WAS TAUGHT TO TALK BY A
, JERK. "

250 DATA "I, SAY, HOW. CAN Y
OU BELIEVE ANYTHING SAID BY
A, COMPUTER THAT CAN NOT TAL
K. "

260 DATA I CAN ANSWER THE TE
LIPHONE. WOULD YOU LIKE TO H
EAR ME?

270 DATA "HELLO. I,CANT CUM,
TO,THE,PHONE,RIGHT,NOW. BUT,
IF,YOU,WILL,LEAVE,YOUR,NAME,
AND,NUMBER,I,WILL,GET,BACK,T
O,YOU, AS,SUNE,AS,I, CAN. "

280 DATA ZZZ
```

REVIEW OF TELCO 2.3
by Frank Garvin

Telco Terminal Emulation program by Charles Earl is said to be the best, and the most flexible terminal program ever written for the TI99/4A or the Geneve 9640. And to this I must agree. It works with almost any system I have ever worked with. The only problems I have ever had was down loading or logging to hard drive. And with version 2.3, down loading and logging to Cor-Comp Ram Disk. Version 1.3 worked very well with the Cor-Comp 512k Ram Disk card. Many programs that are up graded seem to run into this kind of problem, and there are some systems that will not work as well with the up graded versions. The only short comming of the program for the normal user would be that they should have two disk drives. The program disk needs to be in one drive at all times, because the program loads different modules for different functions as they are needed. One way around this is to call the functions up that you will need before you need them, and using the <FCTN>9 key to escape. You can load two modules into memory on the 4a with the E/A or Xbasic cartridges. Or three with the Min/Mem or Super Cart cartridges or using the 9640. For me I use the 9640 with the program on Hard Drive, and four floppy drives for down loading or uploading file storage. And one of those drives is a DS/DD 80 track. I use the 9640's Ram Disk to log, for speed. So for me I have more than enough room. But someone with one SS/SD drive might like to use a program that loads everything into memory at one time to free up the disk drive for the logging and down loading.

One of the nice things about Telco is it has one of the most complete Document files of any program available. Version 1.3's Docs even goes into how to connect a modem to the RS232, which is not in Version 2.3's. But, I did have trouble when setting up the timings for the Auto-Dialer, I don't think the documentation covers that area well enough. It could give you some more examples of what works on some diffrent modems. I had to play with it for a long time, calling myself and then calling the weather to test it to keep it from hanging up or redialing to soon. Then I called a BBs to fine tune it. I finally settled on Modem Echo Time :500 , Redial Pause Time :240. But other numbers may also work for you. You change them in the Modem Set Up section in the SET UP Option. Once you set it up and save it, all works very well. You also modify the program defaults from easy to follow menus, using the Documentation to help you understand what you need to do, and save the setup back to the program disk. You don't need to sector edit, or set it up by hand every time you load Telco to have it match your system. The Auto Dialer Directory is setup and edited from the Telco program and holds 99 phone numbers, with the ability to change Terminal mode, Parity, Baud rate, and Terminal width (ie 40 or 80 columns or any width that you want) and Duplex for each phone number. So you don't have to remember the setup for each Bulletin Board or Information Service you call. No need to use a separate program to make phone files, like some other Terminal programs. Just set Telco up one time. And when it's loaded follow the pull down menus, push a button, and your ready to go. If the number is busy, Telco will hang up and try it again. You can choose more than one number from the Phone Directory and Telco will dial one number after after another till it finds one that is not busy. It then connects to that system, switches to the terminal mode and alerts you of the connection.

Telco has another plus, all function are menu driven or can be

accessed by function keys at any time. <FCTN>9 pulls down the menus, <FCTN>7 gives you a help screen with key commands if you need a reminder. So either way you like to do it, the program will fit you.

There is even a MACRO section. Macros are character strings of up to 36 characters you presave. Then you can use them with a few key inputs from the Terminal mode. You edit and save them from within the Telco program, and use them by pressing <FCTN>M and the letter the Macro is saved under. You can have 26 of them, and they are good for those cute sign offs, or service commands, little faces (:>) or whatever you like to do with MACROs. You can even link them to make much larger Macros.

You can Up Load or Down Load files in Ascii or Xmodem or Ymodem or Compuserve B or TIbbs Xmodem format. If you are calling a BBs like the BBBB in Clinton, MD that is run on a TI99/4A you should use TIbbs Xmodem. If you are using a service like Delphi you should use Xmodem or Ymodem and all will work fine. Some people make up Text files for message base use and Up Load them using Ascii, just as if they were writing them at the time, but much faster. That takes some playing with to get it to work well with some services, but can save you time and money on pay systems.

There is also a Catalog function that lets you Copy, Delete, Protect, and Unprotect files from within the program.

You can Log to disk and Log to printer at the same time, or either one alone. A Log file is the data that appears on the screen that is saved to disk or printer. I Log all info to disk at all times so I can read over it in more detail after I leave the BBs, so I can save time on Line. If it is a pay Service, this can save you alot of money, and you can always call back to leave messages or comment at a later time. The Log files can be saved in TI Writer size files, or one continuous file, which every you prefer. They can be started and stopped (Hold Log) or Opened and Closed at any time while in the program. And when you quit the program, if you have a Log open it will be automaticly saved before Telco quits, so you will not lose a thing. You can also Review the screen buffer at any time. But the buffer can't always hold all the information because it does fill a memory buffer. So when it is full it clears the oldest line in the buffer to make room for the new line it is receiving. But a Log file can always be reviewed. And for those with 80 column systems, Telco will work with both. I sometime use the 4A system with the same copy of Telco, and it automaticly changes back to 40 columns, but on the 9640 I have a choice of which display screen I want to use. In the 40 column mode you can have the screen shift automaticly, like TI-WRITER or you can control it manually. Or you can set your terminal mode at 40 columns and see it all on one screen. One problem with the 40 column terminal mode is all logs will also be in 40 columns. This can waste alot of disk space and paper if you print them.

All in all, I think Telco, with the little work that is needed to configure it, is the best terminal program available for the TI99/4A and the Geneve 9640 at this time. And don't forget, "IF YOU USE IT" send your payment to the author, for he has put many, many hours into this fine program. He only asks for $20, and his address can be found in the Documentation.

So have "Fun", and I'll see you on the BOARDS. (:>)

MANIPULATING DV/80 FILES, Part 2

By Art Byers

Creating a data base using TI-WRITER

Texas Instrument's TI WRITER is an exceptionally powerful software tool. Most of us who use it, hardly ever access more than half of its many features, - nor do we realize how to fully exploit those features we do use.

As one example, we all use the Tab function at one time or another to set up columns. Perhaps we do it to write source code of an assembly program, perhaps to set up columns of figures on a small chart.

One more use for the TAB is to set up fields for a small data base. On this disk is a DV/80 file created on TI WRITER called TRICITIES. It is the roster of the Tricities 99'er club of Kennewick WA.

Five lines of this file are reproduced below to show you how it has been set up by columns, using the TAB function, into the fields of a data base.

DUANE/TRINA	DUSTIN	20 NUCLEAR LANE	RICHLAND	WA 99352
EUGENE J.	WALTER	1958 THAYER	RICHLAND	WA 99352
TERRY	TERRASS	2022 WEISKOFF	RICHLAND	WA 99352
TROY	KLINGELE	808 N SYCAMORE	PASCO	WA 99301
CLINARD V.	HILL	919 S HUNTINGTON PLACE	KENNEWICK	WA 99336

The above fields are, obviously, Firstname, Lastname, Address, City, State, and Zip Code. It is easily possible to manipulate these fields as in any other data base. All we have to know is the starting column of each field and the length of each field (or have our working program calculate the field length).

This article will demonstrate one of the things we most often want to do with a data base,- sorting. On this disk is a program call FIELDSORT. Reboot this disk, holding down BREAK Fctn/4, once it starts to boot. At the prompt, type: RUN "DSK1.FIELDSORT"

The program itself is listed below as part of the article. It is bare bones with few bells and whistles as it is just to illustrate the points above.

You can chose to print the sorted file back to disk as a DV/80 by rewriting line 200 as:
OPEN #WP:"DSK1.MYFILE",OUTPUT - but remember to put in a blank disk before the write to disk starts.

The program allows resorting the database by any field. There is nothing amazing about any of it, but you can learn by looking at how the field length is calculated. The tail remarks in the program itself should be enough for you to follow the flow. RUNning the program will show you how successfully the DV/80 manipulation has been accomplished.

Credit is due to Grillo and Zbyszynski for their tome "Data and File Management for the TI-99/4A". Much of the technique was learned from that book.

MANIPULATING DV-80 FILES Cont'd...

```
100 ! SAVE DSK1.FIELDSORT
110 ! multikey sort of string data
saved as structured (by coluen) DV/80
file
120 DATA 1,16,29,52,65,68,72
130 ! **
140 DIM S(7),N$(25)! S() is starting
col.of field, N$() holds list of
nanes
150 FOR K=1 TO 7 :: READ S(K):: NEXT
K ! read structure of fields. 7th is
start of non existing last field
160 OPEN #6:"DSK1.TRICITIES",INPUT ::
FOR J=1 TO 25 :: LINPUT #6:N$(J)::
NEXT J :: CLOSE #6 ! read data off
dv80 disk file
170 CALL CLEAR :: PRINT "ENTER 0 FOR
SCREEN PRINT ENTER 1 FOR PRINTER 0"
180 ACCEPT AT(23,21)VALIDATE("01")
SIZE(-1)BEEP:WP ! WP= Where Print? #0
autonatically goes to screen
190 IF WP=0 THEN 210
200 OPEN #WP:"PIO",OUTPUT
210 CALL CLEAR :: PRINT "Select the
field on which to sort 1-6": :
220 PRINT "1 = First Name"
230 PRINT "2 = Last Name"
240 PRINT "3 = Address"
250 PRINT "4 = City"
260 PRINT "5 = State"
270 PRINT "6 = Zip Code": :"What Key?
2"
280 ACCEPT
AT(23,12)VALIDATE("123456")SIZE(-1)BEEP:K1
290 PRINT #WP
300 ON K1 GOSUB
500,510,520,530,540,550 ! print what
field is the key
310 C=S(K1)!C=Coluen nunber of key
field
320 L=S(K1+1)-S(K1)!L=length of field
330 N=25 :: GOSUB 380 !Send to sort
340 CALL CLEAR :: FOR J=1 TO N ::
PRINT #WP:N$(J):: IF J/7=INT(J/7)AND
WP=0 THEN GOSUB 560 ! send to hold
screen for reading
350 NEXT J :: IF WP=1 THEN CLOSE #WP
360 GOSUB 560 !send to hold screen
'til press enter
370 GOTO 170 ! start over again
380 ! **Shell-Metzner Sort**
390 M=N
400 M=INT(M/2)
410 IF M=0 THEN RETURN
420 K=N-M :: J=1
430 I=J
440 P=I+M
450 IF SEG$(N$(I),C,L)<=SEG$(N$
(P),C,L)THEN 480
460 T$=N$(I):: N$(I)=N$(P):: N$(P)=T$
:: I=I-M
470 IF I>=1 THEN 440
480 J=J+1
490 IF J<=K THEN 430 ELSE 400
500 PRINT #WP:"BY FIRST NAME": : ::
RETURN
510 PRINT #WP:"BY LAST NAME": : ::
RETURN
520 PRINT #WP:"BY STREET ADDRESS": :
:: RETURN
530 PRINT #WP:"BY CITY": : :: RETURN
540 PRINT #WP:"BY STATE": : :: RETURN
550 PRINT #WP:"BY ZIP CODE": : ::
RETURN
560 PRINT :: INPUT "PRESS ENTER":A$
:: PRINT :: RETURN
570 CLOSE #WP
580 END
```

A HOMEWORK CHALLENGE!

With the example of the above fresh in your minds, let me give you club members some homework to sharpen your programming skills:

(1) Write a program that will read the data base and print out standard 3 1/2 by 15/16" mailing labels. I suggest you set up as a 3 line label with three empty lines between each name set.

(2) Take one field and fill it with varied dollars and cents numbers (ie $15.50). Next write a prograa that will locate that field anyway you want - for example: by column or by using POS to locate the dollar sign - and print out that field 20% higher or lower. In other words, write a program that will manipulate the money field.

(3) Last, write a program that will enable you to make global changes in ANY and all fields -that is, give everyone the same first name - OR find one particular zip code and change all examples of it to 00000.

**********EoF**********

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THE NATIONAL "TI-ECHO"

FOR THE TI-99/4A & GENEVE 9640 USERS

The topic of this article is the network and how to connect with it.

Are you missing out? There's a national TI Conference that you can probably access LOCALLY, without the monthly fee for commercial services like Compu$erve, GEnie, or Delphi.

The network is called FidoNet and the TI-Echo is one of many conferences available to users. Access into the network is via one of the nearly 10,000 local BBS systems in the US and Canada.

For an isolated TI user group the TI-ECHO can provide up-to-date information on what's new, like the new "DeZipper" program by Ben Yates or Gary Bowzer's "Zmodem" for the TI!

If you have questions about hardware, software or system bugs, someone on the network CAN and WILL answer your questions. You might even hear directly from the software authors such as TI-ECHO participant Beery Miller.

HOW TO OBTAIN ACCESS

Check out the BBS systems in your local area. If one of the systems is identified as a Fido node, ask the sysop to PLEASE carry the TI-ECHO. It is IMPORTANT that you inform the sysop that the TI-ECHO is on the "BACKBONE" and that traffic averages between 7-15 messages daily. The term "BACKBONE" is important to sysops as it tells them they will not have to make any additional calls and it will come via the normal feed. Informing them of the traffic size is a courtesy and it will insure that you will probably get the ECHO. Some sysops do not like to carry numerous echos that have 100-200 messages a day (i.e Star Trek: The Next Generation, Genealogy).

The following are numbers of FIDO systems that support the TI and carry the TI-ECHO. Special thanks goes to Walter Tietjen for netmailing the numbers.

STAR ONE	Tulsa, OK
9600 HST	1 (918) 835-8933
TI-RALEIGH	Raleigh, NC
2400	1 (919) 833-3412
RADIO FREE	Milwaukee, WI
9600 HST	1 (414) 352-6176
FULL MOON	Memphis, TN
9600 HST	1 (901) 386-1760
BOB'S PLACE	Pittsburgh, PA
9600 HST	1 (412) 344-8504
2400	1 (412) 341-5313

SHARING KEEPS THE TI COMMUNITY ALIVE!

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FEBRUARY 1992 NEWSLETTER

TI SLAVES

OUR NEXT MEETING IS FEBRUARY IS 1992 AT 9:00 AM WE MEET IN THE DISABLED AMERICAN VETERANS HALL AT 273 E. 800 S. PLEASE BE THERE PROMPTLY.!!

COME AND HAVE FUN.

OGDEN TI USERS GROUP

OUR NEXT MEETING IS FEBRUARY 1ST AT 9:00 AM AND FEBRUARY 18TH.

WE MEET AT THE OGDEN MUNICIPAL AIRPORT IN THE FIRST BUILDING JUST EAST OF THE NEW TOWER.

COME HAVE FUN.

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