

LEHIGH $99^{\circ}$ F

## PRESIDERNT

A week ago $I$ received my new monitor which is composite and RGB. I first tried it on my old 32 column set- up and was very pleased with the added sharpness and the fact that I was able to see much more of the screen. This monitor was recommended by Bud Mills and I couldn't be more pleased with its performance. That night $I$ finished my RBG cable and install my TIM keyboard.

I have worked with 80 -columns before on my victor but that was in monochrome. The performance of the OPA-TIM on the TI-99/4a is outstanding. It is a real pleasure to write a letter on TI-Writer in 80 -columns; it is so easy to review the letter and not have to shift to check over what you have written. This alone is worth the change. Since then I have been trying some of the programs that came with the boards and develop- ing a new disk of Pkunnelweb 4.4 for 80 -column work. I am really having fun.

There were a number of programs included with the TIM boards and to date I have only tested a very few. Somehow I have never done much with TI- Artist or that type program and so I have not tried these as yet. I did

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Next meeting: 7:30 PM, October 19,1992
Conference Rooms A-D, Sacred Heart Hospital 4 th and Chew Streets Allentown, Pennsylvania 'TER GROUP


# MAILROOM <br> a ceview by <br> Brad Snydex 

I know what you're saying! No, not another mail list program! Well, if that's what you're saying, you're right. This isn't just another mail list program. This one has features that the others don't have, along with the standard things that you would expect from such a program. You can create a mail merge file from the data stored in the mailroom for sending out form letters with TI-Writer, and there are many options in the printout section. And if you're lucky enough to have a Geneve or an 80 column dovice on your TI, there is also an 80 column version of the program that has identical function, but looks really good in 80 columns with the windows and all.

The program was written by Larry Tippett and is distributed by Asgard Software. The docs were written by Harry Brashear, and are very complete. I think it is good idea to have the docs written by someone other than the author, that way they get written with the user in mind. Also, credit needs to go boAlexander Hulpke, as Larry used his XB call links to provide an 80, cofumn scrien in Extended Basic. If you -don's have Asgard's catalog, just write to them and ask for one. It's loaded with all sorts of programs for your TI and Geneve. I'11 supply the address at the end of my review.

[^0]is to run the program and configure it for your system. Boot the program and select option 9 from the main menu. Then press 'C' to enter the configuration section of the program. You will be asked for the default disk drive that the data file will usually reside in, the name of the data file, the printer port name, the modem port name, the dialing string, and the hangup string. The default drive and file name are pretty obvious, as is the printer name. The default modem name should work for most people, but make sure that the baud rate specified is not over what your modem's maximum baud rate is. The default dial string and hangup string should work for most modems out there.

The default dial string is: "ATDT". That stands for ATtention, Dial, using Tones. If you don't have a touch tone telephone line you will have to change that to: "ATDP" so that your modem uses the Pulse method of dialing. If you want, you can also put other modem commands in the dial string. I changed my dial string to: "ATM1DP" so that the speaker in the modem would be enabled and $I$ could hear the progress of the phone call being placed for me. Most modems power up with the speaker enabled, but $I$ have Telco configured to turn it off, so if I ran Telco before mailroom I couldn't hear what was going on. Just add "M1" right after the "AT" in the dial string.

Next you will be asked for your return address. This will be used if you select the option to print return address labels, or to print your return address on an envelope.

The next thing is to select the colors that suit you. The defaults look good to me, so I didn't change anything here.

Now you are ready to use Mailroom!
Just select option $\# 1$ on the main menu and start entering in your list of names, addresses and phone numbers. To start off only enter in about 12 or so, that way it will be easy for you to experiment with all the different features and printout capabilities of the program. One of the fields that may seem odd is the "code" field. If you are creative, you will find many
uses for this. It can be used in the global search and also in selecting which records get printed or saved to a subfile. Por example, if you are creating a list of you friends and family, you may want to give your family a different code than friends. That way you will be able to get a seperate printout of the two if desired, or create another file with just the family, etc. Answer "Y" to the corporation field if the name you just entered is a business. If you don't, the sort will look for a last name and the order won't be correct. Answering " $Y$ " to the corporation field will also cause the program to ask you for an "attention" line to be printed on an envelope or mailing label.

Option will let you search for a record, once located you will be given the option to update, print, or dial the number. If you don't enter a search string, you can enter a phone number that isn't on record to be dialed. Note that if you choose to print a record after a search has found something, you are given the option to print on mailing label, envelope, or rolodex card.

Option \#3 lets you enter a name and address that you want to print out on a label, envelope or rolodex card. It does not get saved in the mailroom, and is for something that you expect to use only one time.

Option $\# 4$ prints your return address on mailing labels. It uses the address that you entered in the configuration section of mailroom. I have a minor complaint with this option, and that is that the program will only print one label at a time. Por each label you have to press enter each time. Now, with the Geneve, this is minor. Because of the Geneve's keyboard buffer you don't have to wait for the printing to stop to reselect the option. But on a TI you will have to wait for the printer to stop every time. Maybe a future version will simply ask you how many labels you want. (That's a hint Larry).

Option 05 lets you change the disk drive that the program looks to for your data file.

Option \#6 lets you change the name of your data file.

Option $\# 7$ will let you view all th names in the data base or enter th printout setion. If you view the dat base, a pointer will appear next $t$ the names. You move it with the spac bar, and when you have it pointing $t$ the name you were looking for, you ca press "D" to dial the number, " $P$ " t print that record, or "U" to updat the record.

If you pressed "p" right after yo selected option \#7, another progra will be loaded to handle the printin of your file. There are so man options in this section that it's har to absorb all at once. (Por m anyway). You can choose to have th file sorted before printing, by an field. If you choose to sort, th maximum is 500 records, and the whol file must be printed. To get th option to sort, you must first selec the option to not select addresses That way the whole file will b accessed.

If you want to select certai addresses you can select what recor to start at, and either tag th records that you want one by one, o tag the whole file, or do an auto-tag where the information you entered i the code field will be used $t$ automatically select the records fo you. You may ask why there is a option to tag all the records, why no just choose to NOT select addresse and you will get the whole fil anyway? Well the answer is that whe not selecting addresses your onl option is to send them to the printer After tagging, you can still send $t$. the printer, or to a disk file, or mail merge file.

When you finally print your file you still have the option of printin to mailing labels, rolodex cards, or compressed listing on standard printe. paper.

If you send the tagged files $t$, disk you can select to create anothe, mailroom file, or a mailmerge fil. for TI-Writer. The mail merge file i a really neat option of this program as it allows you to write a for letter with TI-Writer, and mailroo creates file with all the individua information in it. If you do i right, you just write one letter, an

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get as many personalized letters as you had records tagged in mailroom. Great for your personal Christmas letter!

Option \#8 goes through your file record by record and lets you update them as needed.

When mailroom dials a phone number for you, you are told to press the spacebar. Before you press it, pick up your telephone receiver. Then when you press the spacebar, your modem will disconnect and let you use the phone. If you get a busy signal, hang up and press "R" to redial the number. Another winor bug: if you are using pulse dialing, "ATDP", you will have to give enough time after the program tells you to press the spacebar for the modem to complete dialing the number. If you pickup the phone as soon as the program tells you, or press the spacebar, you will interrupt the dialing. Pulse dialing takes longer than tone dialing, and the program doesn't take that into account.

Well, other than my two minor complaints, this program is great! I think that you will find it a useful and unique addition to your library, and not just another mail list program to be tucked away. This one you'll use!

To purchase Mailroom, or for more info or a catalog, write to:

## ASGARD SOPTWARE

P.O. Box 10306

Rockville, MD 20849
Price: $\$ 14.95+\$ 3.00$ S\&H, TI and Geneve (or TI with 80 column device) versions are both included on one disk.

Later. . . . . .Brad
(L99CG Treasurer)

## COMPARING HEALTH INSURANCE

## by Jim Peterson

Por many of us nowadays, our biggest worry is the outrageous cost of health care; our second biggest worry is the rapidly rising cost of health insurance. and the third worrv mav be the
flood of health insurance advertisements in our mail.

I thought it would be useful to write a program that would compare the cost effectiveness of these policies, so I sent off for a number of their offers. I soon realized that such a program would be impossible. You can't compare apples and oranges. There is no common ground for comparison. Some policies offer a fixed amount per day, others offer a fixed percentage of expenses per day. Some pay high benefits for short periods, others pay lower benefits for longer periods. All have their own particular exceptions, deductibles, etc. In order to determine which policy might be best for you, you must make several blind guesses as to what your future might bring.

However, you should certainly do whatever you can to pick the best policy, because they obviously are not all equal. I found that when a company offers two levels of protection, the higher level tends to be a ripoff that pays little more in benefits in relation to its much higher premiums. I also found that some policies being endorsed, promoted and advertised through senior citizen organizations, veterans societies, etc., are ripoffs.

Although I cannot offer you a general purpose program to make comparisons, you might be able to write your own quite simple program to make the comparisons you are interested in. The following is an example, which I wrote for my own use. It prints out a table showing what my out-of-pocket expenses would be, under each of five options, per each thousand dollars of medical bills between $\$ 2000$ and $\$ 56000$ in a year, for myself and wife.

100 CALL CLEAR
110 OPEN \#1:"PIO", VARIABLE 1 60
120 PRINT \#1:CHRS(15)
130 PRINT \#1:"ANNUAL":TAB(20
):"BLUR CROSS";TAB(40);"BLUE
CROSS";TAB(60);"BLUR CROSS"
;TAB(80);"BLUE CROSS";TAB(10
0);"MEDICARE B"

140 PRINT 11:"EXPENSE";TAB(2
0);"HIGH OPTION";TAB(40);"ST

ANDARD";TAB(60);"HIGH OPTION
";TAB(80);"STANDARD";TAB(100 );"ONLY"
150 PRINT \#1:TAB(20);"AND ME DICARE B";TAB(40);"AND MEDIC ARE B";TAB(60);"ONLY";TAB(80

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THEN $\mathrm{J}=\mathrm{T}-1::$ goto 270
260 NEXT J :: L=LL :: GOTO 2 50
270 PRINT "AND THE LOWEST CO MMON MULTIPLE IS";

Joy Warner called from the L.A. group, and mentioned that it would be nice to have a program to print out a page of math problems, and a page of answers. So here is one that will randomly create any number of either addition or subtraction problems, within any specified range of numbers, and output the desired number of copies to a printer in two columns of expanded print, numbered in sequence, plus a numbered answer sheet to make it easy for the teacher.

100 display at $(1,4)$ erase all : "MATH PROBLEM PRINTER" !by Jim Peterson
110 DIM A(200), H(200), L(200) :: OPEN \#1:"PIO" :: PRINT \#1 : CHRS(27)\&"@"\&CHRS(27)\&"И"\&C HRS(1);
120 MS(1)="ADDITION" : : MS(2 )="SUBTRACTION" :: DS(1)="+ " :: DS(2)="-":: ONS=CHRS( 27)\&"-"\&CHRS(1):: OPF $\$=$ CHRS( 27)\&"-"\&CHRS(0)

130 DISPLAY AT( 3,1 ): "Do you want?":"":"1. "\&MS(1):"2. "\& MS(2):: ACCEPT AT $(3,14)$ VALID ATE("12")SIZE(1)BEEP:C
140 DISPLAY AT $(8,1)$ :"Range o f numbers?": "Prom": "To" :: A CCEPT AT $(9,6)$ VALIDATE (DIGIT) BEEP:LN :: ACCEPT AT $(10,4)$ VA LIDATE (DIGIT)BEEP:HN :: IP L $\mathrm{N}>=\mathrm{HN}$ THEN 140 ELSE $\mathrm{HN}=\mathrm{HN}-\mathrm{LN}$ 150 dISPLAY AT $(13,1)$ : "How ma ny problems?" :: ACCEPT AT(1 3,20)VALIDATE (DIGIT) BEEP:P 160 DISPLAY AT $(15,1)$ : "How ma ny copies?" :: ACCEPT AT(15, 18) VALIDATE (DIGIT) BEEP:CC 170 POR J=1 TO P :: GOSUB 29 $0:: \mathrm{H}(\mathrm{J})=\mathrm{N} 1:: \mathrm{L}(\mathrm{J})=\mathrm{N} 2$ 180 IP $\mathrm{C}=1$ THEN $\mathrm{A}(\mathrm{J})=\mathrm{H}(\mathrm{J})+\mathrm{L}($ J) ELSB $A(J)=H(J)-L(J)$ 190 NEXT J
200 POR J=1 TO CC :: GOSUB 3 10 :: POR K=1 TO P STEP 2 210 T1§=STRS $(K) \&$ ". "\&STR§ $(H(K)):: T 2 S=\operatorname{STR} S(K+1) \& "$. "\&STRS(H(K+1))
220 PRINT \#1:TAB(15-LEN(T1\$) );T1\$;TAB(35-LEN(T2\$));T2\$

LBHICH 99'
230 T1S=DS(C) $\operatorname{SSTRS}(\mathrm{L}(\mathrm{K})):$ : T $2 \$=\operatorname{DS}(\mathrm{C}) \& S T R \$(\mathrm{~L}(\mathrm{~K}+1))$
240 PRINT \#1:TAB(15-LEN(T1\$) );ONS\&T1\$\&OPPS\&RPTS(" ",20-L EN(T2S))\&ONS\&T2S\&OPRS
250 PRINT \#1:"":"":"" :: IP
K/19=INT(K/19)THEN PRINT \#1: CHRS(12);
260 NEXT K : : PRINT \#1:CHRS( 12)::: NEXT J

270 PRINT \#1:TAB(16);"ANSWER S":"":""
280 POR J=1 TO P STEP 2 :: P RINT \#1:TAB(6);STR\$(J)\&"
;A(J) ;TAB(26);STRS (J+1)\&".
"; A(J+1):: NRXT J :: STOP
290 RANDOMIZE : : N1 $=$ INT(RND* HN + LN $):$ : $N 2=1 N T($ RND* $H N+L N)::$
IP N1=N2 THEN 290
300 IP C=2 AND N2 1 N1 THEN T= N2 :: N2=N1 :: N1=T :: RETUR N RLSE RETURN
310 PRINT \#1:" "\&MS(C) \&" PROBLEM PRINTRR":"":"":"" :"" :: RETURN

And this one will do the same with multiplication problems.

100 DISPLAY AT $(1,4)$ erase all :"MULTIPLICATION PROBLEMS":" PRINTER" !by Jim P

## eterson

110 DIM A(200), H(200), L(200) :: OPRN \#1: "PIO" : : PRINT \#1 :CHRS(27)\&"@"\&CHRS(27)\&" $¢=\& C$ HRS(1);
120 ON\$=CHRS(27)\&"-"\&CHRS(1) :: OPFS=CHRS(27)\&"-"\&CHR\$(0) 130 DISPLAY at $(8,1)$ : "Range o f multiplicand?": "Prom": "To" :: ACCEPT AT $(9,6)$ VALIDATE $(D$ IGIT)BEEP:L1 :: ACCEPT AT(10
,4)VALIDATE(DIGIT)BEEP:H1 ::
IP L1 $>=$ H1 THEN 130 BLSE H1= H1-L1
140 DISPLAY AT( 12,1 ): "Range of multiplier?":"Prom": "To" :: ACCEPT AT $(13,6)$ VALIDATE $(D$ IGIT) BEEP:L2 :: ACCEPT AT(14 4) VALIDATE (DIGIT) BEEP: H2 150 IP L2 $=$ = 2 THEN 140 ELSE R=LEN(STRS(H2)):: H2=H2-L2 160 DISPLAY AT $(16,1)$ : "How ma ny problems?" : : ACCEPT AT(1 6,20)VALIDATB(DIGIT)BEEP:P 170 DISPLAY AT(18,1):"How ma ny copies?" :: ACCEPT AT(18, 18) VALIDATE (DIGIT) BEEP:CC 180 POR J=1 TO P :: GOSUB 31 $0:: \mathrm{H}(\mathrm{J})=\mathrm{N} 1:: \mathrm{L}(\mathrm{J})=\mathrm{N} 2$
$190 \mathrm{~A}(\mathrm{~J})=\mathrm{H}(\mathrm{J}){ }^{\star} \mathrm{L}(\mathrm{J})$
200 NEXT J

210 POR J=1 TO CC :: GOSUB 3 20 :: POR $\mathrm{K}=1$ TO P STEP 2 220 T1S=STR\$(K)\&". "\&STR\$ ( $\mathrm{H}(\mathrm{K})$ ): : T2S=STRS(K+1)\&".
" 8 STRS $(H(K+1))$
230 PRINT \#1:TAB(15-LEN(T1\$)
);T1\$;TAB(35-LEN(T2\$));T2\$
240 T1S="X "\&STRS(L(K)):: T2 S=" X " $\& S T R S(L(K+1))$
250 PRINT \#1:TAB(15-LEN(T1\$) );ONS\&TIS\&OPFS\&RPTS(" ",20-L EN(T2\$))EON\$\&T2\$\&OPF \$
260 POR $\mathrm{S}=1$ TO $\mathrm{R}+3$ :: PRINT \#1:"" :: NEXT S
270 LC=LC+5+R :: RC=LC+5+R : : IP RC> $=60$ AND $K<P$ THEN PRI NT \#1:CHRS(12):: LC=5
280 NEXT K : : PRINT \#1:CHRS( 12);:: NEXT J

290 PRINT \#1:TAB(16);"ANSWER S":"":""
300 POR J=1 TO P STEP 2 :: P RINT \#1:TAB(3);STRS(J)\&". " ;A(J);TAB(23);STR\$(J+1)\&".
";A(J+1):: NEXT J :: PRINT 1:ChRS(12):: STOP
310 RANDOMI2R :: N1=INT(RND* H1+L1): : N2=INT(RND*H2+L2):: RETURN
320 PRINT $11: " \quad$ MULTIP LICATION PROBLEMS":"":"":": "" : : LC=5 : : RETURN

And division -
100 dISPLAY aT( 1,6 ) ERASE ALL :"DIYISION PROBLEMS":"

PRINTER" lby Jim Peterso n
110 DIM A $(200,2), H(200), L(20$ 0):: OPRN 11:"PIO" : : PRINT \#1:CHR\$(27)\&"@"\&CHRS(27)\&"W" \&CHRS(1):
120 DISPLAY AT $(8,1)$ : "Range o f dividend?": "Prom": "To" : :
aCCEPT AT $(9,6)$ VALIDATE (DIGIT ) BEEP:L1 :: ACCEPT AT $(10,4) \mathrm{V}$ ALIDATE(DIGIT)BEEP:H1:: IP L1 $>=$ H1 THEN 120
130 DISPLAY AT $(12,1)$ :"Range of divisor?":"Prom": "To" :: ACCEPT AT $(13,6)$ VALIDATE $(D I G I$ T) BEEP:L2 :: ACCEPT AT $(14,4)$ VALIDATE(DIGIT)BEEP:H2
140 IP L2 $=$ = 22 THEN 130 ELSE $\mathrm{R}=\operatorname{LEN}(\operatorname{STR} \$(\operatorname{INT}(\mathrm{H} 1 / \mathrm{H} 2))) \star 2::$ H2=H2-L2 :: H1=H1-L1
150 DISPLAY AT $(16,1)$ : "How ma ny problems?" :: ACCEPT AT(1 6,20)VALIDATE (DIGIT) BEEP: P
160 DISPLAY AT $(18,1)$ : "How ma ny copies?" :: ACCEPT AT(18, 18)VALIDATE (DIGIT)BEEP:CC

170 FOR J=1 TO P :: GOSUB 31
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$0:: H(\mathrm{~J})=\mathrm{N} 1:: \mathrm{L}(\mathrm{J})=\mathrm{N} 2$
180 A(J,1) $=\operatorname{INT}(\mathrm{HI}(\mathrm{J}) / \mathrm{L}(\mathrm{J}))::$
$\mathrm{A}(\mathrm{J}, 2)=\mathrm{H}(\mathrm{J})-\mathrm{A}(\mathrm{J}, 1) * \mathrm{~L}(\mathrm{~J})$
190 NEXT J
200 POR $\mathrm{J}=1$ TO CC :: GOSUB 3
20 :: POR K=1 TO P STEP 2
210 LC=LC+1 :: T1S=STRS (K) \&"
"\&RPTS(" ", LEN(STRS(L) K
))))\&RPTS("_",LEN(STRS(H(K))
))
220 T2S=STRS $(K+1) \& " . \quad$ "\&RP
TS(" ", LEN(STRS(L(K+1))))\&RP
TS("_", LEN(STRS(H(K+1))))
230 PRINT \#1:TAB(15-LEN(T1\$)
);T1S;TAB(35-LEN(T2\$));T2\$
240 TIS=STRS(L(K))\&";"\&STRS(
$H(K)):: ~ T 2 \$=\operatorname{STR}(L(K+1)) \& " ' "$
\&STRS( $\mathrm{H}(\mathrm{K}+1)$ )
250 LC=LC+1 :: PRINT \#1:TAB(
15-LEN(T1\$));T1\$;TAB(35-LEN(
T2\$));T2\$
260 POR S=1 TO R+3 :: LC=LC +
1 :: PRINT \#1:"" :: NBXT S
270 IF 66-LCくS+R AND K<P THE
N PRINT \#1:CHRS(12):: LC=5
280 NEXT K : : PRINT \#1:CHRS(
12) ::: NEXT J
290 PRINT \#1:TAB(16);"ANSWER
s":"":""
300 POR $\mathrm{J}=1$ TO $\mathrm{P}::$ PRINT 11
:TAB(3);STRS(J)\&". ";A(J,1)
;"REMAINDER "; $A(\mathrm{~J}, 2)::$ NEXT
J :: PRINT \#1:CHRS(12):: STO
P
310 RANDOMIZE :: N1=INT(RND*
H1+L1):: N2=INT(RND*H2+L2)::
RETURN
320 PRINT \#1:" DIV
ISION PROBLEMS":"":"":"":""
:: LC=5 :: RETURN
Bud Wright wrote this one for Irwin Hott, so he could listen to lower case text with the Speech Synthesizer. Imbed it with alsave, access it with CALL LINK("CAPS",AS) and it will instantly convert any lower case letters to upper case. I found it invaluable in writing keyword search programs.

* CAPS/S by bud wright
* VERSION 1.1 10/17/86
STRREF BQU >2014
STRASG EQU >2010
MREG BSS 32
STRBUP BYTE 255
BSS 255
DEF CAPS
CAPS LHPI MREG
CLR RO
LI R1, 1

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seto @Strbup
LI R2,STRBUF
BLWP @STRREP
movb @Strbup,R2
SRL R2,8
JEQ CAPOUT
LI R1,STRBUF +1
CAPS2
MOVB *R1,R3
SRL R3, 8
CI R3,96
JGT CAPS 1
CAPS3 SWPB R3
MOVB R3,*R1+ Memory full,
DEC R2
JNE CAPS2

CLR RO
LI R1,1
LI R2,STRBUP
BLWP @STRASG
CAPOUT LWPI >83EO B @ $>006 \mathrm{~A}$
CAPS 1 CI R3,122
JGT CAPS 3
AI R3, -32
JMP CAPS 3 END

Jim Peterson

## SIMPLE PROGRAMS

## by Jim Peterson

I like SIMPLE programs that do exactly what I need to do when I need do it, and nothing more - without the bells and whistles and fancy title screens, without going through a series of menus to get to what I want.

I have been asked, what is the best checkbook program? I have two disks full in my TI-PD library, but I don't know which one is best, because I have never used any of them. I have my own little checkbook program. It is so little that I don't even bother to save it - I just key it in whenever I need to do any adding or subtracting. It goes like this -

1 INPUT A :: T=T+A :: PRINT ,T :: GOTO 1

When I receive a bank statement, I open my checkbook, check off all the debits and credits recorded on the statement, then run that little program. I enter the bank's ending balance, then enter each outstanding check or other outstanding debit in the checkbook as a negative value (i.e., with a minus sign in front) and every deposit not yet recorded by the bank as a positive value. I should end up with my checkbook's ending balance. If I don't, I next enter my checkbook ending balance as a negative value (presuming it is not already negative!) to see how much the discrepancy is, and scan the checkbook and statement for an entry of that amount which may explain the error. If not, I hit PCTN 4, run the program again, enter my checkbook balance the last time I reconciled it, enter each succeeding debit as negative and each credit as postive, and see if I can spot an error in my calculations. If not, I give up - and I don't think

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that any checkbook program could help me go any farther.

Yes, I know that some of those programs will give me a printout of all my transactions, after I have keyed in a lot of data - but why do I need a hard copy of something that is already recorded in my checkbook.

And I know that some programs will give me a record of bills paid in various categories. I don't need that at the end of the year I run a simple little program I wrote, Adder-Upper, and in 15 minutes with one pass through the checkbook I can total expenses in as many categories as I want.

I have also been asked for a good mailing list program. I have lots of those too, but I haven't tried them. My own mailing list program isn't even a program - it's a D/V80 file created with Punlweb. Just type in the name, address, etc. in 3 or 4 lines, as you want it to appear on the label; hit Enter 2 or 3 more times to make a total total of 6 lines; and start the next name, etc. when you are finished, make sure that the first blank line above the first line of the last address has a line number evenly divisible by 6: otherwise, you didn't space your address 6 lines apart somewhere. Line up your strip labels in the printer, print the file out of Punlweb editor, and that's all there is to it.

It would be a good idea to set up that file in sequence by persons last name, so that you can quickly find them for the purpose of changing or deleting - all done with Punlweb editing commands faster than any computer program could do it. To add a name, just PCTN 4 down to the right spot in sequence, PCTN 8 to open lines, and type it in.

You want something a little more than that? You want to selectively print or skip names? OK, you've got two blank lines after each record, so use the 6 th line to code your special requirements - for instance, a C for Christmas cards, BU for business mailing, B11 for birthday cards in November - just don't use $B$ alone for one code and in combination with something else for another code.

Then, instead of printing through Punlweb, use this program -

100 DISPLAY AT $(12,1)$ ERASE AL L: "Filename? DSK" :: ACCEPT
AT $(12,14)$ BEEP:PS :: OPEN \#1:
I.RHICH 99' RR
"DSK"\&PS, INPUT : : OPEN \#2:"P IO"
110 DISPLAY AT( 14,1 ): "Print
addresses with code -":"":"
to print all addresses, $j$
ust press Enter)"
120 ACCEPT AT(15.1)BEEP:XS
130 LINPUT $\# 1: A S::$ LINPUT \#
1:B\$ :: LINPUT \#1:CS :: LINP
UT \#1:DS :: LINPUT \#1:ES ::
LINPUT \#1: PS
140 IP POS $(F S, X \$, 1)<>0$ OR X $\$$ ="" THEN PRINT \#2:AS:BS:CS:D \$:"":""
150 IP $\operatorname{BOP}(1)\langle>1$ THEN 130 EL SE CLOSE 1

Por a one-time selective mailing load your file, go down through it with PCTN X, type an asterisk in the 6th line of each record you want to print, save the file to another disk, run the above program and enter the asterisk as the special code to select on.

You need a home record-keeping system? Do you really really really need to sort your home records by various fields, print them out, etc.? If so, you need a data base program. But, if you just need to file some info in a way that you can find it again, I have the perfect system for you. I use it often. Technically, it is called the Pile Box Pull Of Ruled $3 \times 5$ Index Cards. Unlike a data base program, this system offers fields of unlimited length, records of unlimited length (if the front of the card is full, flip it over and write on the back; if that is full. stick a second card behind the first), quick manual alphabetic sequencing (probably faster than the computer could do it), quick manual updating and editing with eraser, quick deletions into the wastebasket, and optional cross referencing (if you're not sure by which of several key words you might try to find something, put in a card in alphabetic sequence for each keyword. with a note on it referring to the card containing the data).

Still think you need a computerized record keeping system? OK, how about the Punlweb Index Card Simulation. Just boot up Punlweb, use ( $T$ )ab to put an $R$ at 39, type in whatever you want to keep track of, and save it to disk using a keyword as the filename. They will be automatically sorted into alphabetic sequence. Punlweb's SD will catalog them for you, put whatever you want on the screen, dump it to a

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printer if you want. You have all the grea* editing features of Punlweb to update, delete, etc., and you can cross reference keywords with dumny files. You might want to use DM 1000 periodically to protect your files so that you don't accidentally use the same keyword filename over again and overwrite a record.

Of course, you can only get 127 records on a disk. But a deck of 100 index cards costs me $\$ .59$ at the drug store, and generic disks cost $\$ .25$ or less! Por $\$ 7$ you can set up a filing system with a disk for each letter of the alphabet.

Just one more example of the power of the Punlweb filing system. Before I bought a disk system, I had already acquired or written over a thousand programs, and I had recorded each one on a $3 \times 5$ index card, filed by program name, with the author's name and comments. I promptly transferred all those programs to disk, ran the disks through one of those disk catalogers, and was greatly dissatisfied with the results. I DO NOT LIKE DISK PILENAMES! It is much too hard to remember what I was trying to abbreviate when $I$ saved a file as BRPLTZK. Note: this was in the days before the good catalog programs allowed you to add comments.

I didn't like listings of file names on disk labels either, and I have never used them. I don't want to paw through boxes of full of disks, trying to decipher filenames written in tiny subscript. Obviously, my index card system was better than that, but I wanted a printed catalog, in plain English, in actual program name alphabetic sequence, and with as much other information as possible.

My old Gemini would print 136 characters on a line in condensed print, I wanted each record to be up to that long. Punlweb (or TI-Writer back then) limited me to 80 characters, but no problem; I'11 just use two lines to key them in, and write a little program to combine them into one line for printer output. I set the TI-Writer tabs to give me 25 spaces for full programhname, 16 spaces for author's name, $4^{2}$ bpaces for disk number (I number disks consecutively as I fill them, $a^{\text {a }}$ d file them numerically), 10 spaces for coded language and system require ents. ${ }^{3}$ flispaces for a 1 to 10 star rasing, and the remaining 14 spaces to' begin a brief program description which-could continue for 56
spaces on the next line.
My index cards were filed in sequence by actual program name, so I keyed in their contents in that sequence. As I acquired more programs, I continued to record them on index cards. Every once in a while I loaded my catalog file into Punlweb, FCTN 4 ' $d$ to the proper place in alphabetic sequence, opened a line there with PCTN 8, and typed in the new record. The file soon became too large to load, but it was very easy to use Funlweb's features to split it into two files, then into many files, finally into five disks full of files. Each disk is labeled with the beginning and ending letters of each file, so they can be quickly found.

The last time I updated my catalog and printed it out (I have obtained hundreds of programs since) it contained 4041 records on 50 pages at 80 lines per page, nearly half a million bytes of data. I doubt that anyone else in the TI world has anything like it.

If I'm figuring correctly, it would take about 500 k of RAM to read all that into memory. Since the PC's seem to be so incredibly wasteful of memory, I wonder if a 640 k computer could update that file? If so, could they do it any faster than $I$ can do it with Punlweb?

But, you say, you can't SORT that file! Well, why should I want to? And could that 640 k computer do it? Besides, if I wanted to, I CAN DO IT!

I tried it, just for the heck of it. The only worthwhile field to sort on would be the disk number. So, I did a CALL PILES(9) and ran a little 10-1ine program which opened one file for input and eight for output, read a disk directory, opened each file in sequence, read the records and, if the disk number was less than 9 , wrote the record to the file of the same number. When I was through swapping disks, I had separate files for disks 1 through 8 , still in alphabetical sequence. It would take many hours sort out over 500 disks 8 at a time, but I could cram all those files onto two DS disks and my ramdisk, modify the program a bit, and all I would have to do is change backup disks when they were full. Or to be more sensible, I could extract records in batches of 10 or more, whatever would be small enough to cram into TI-Sort for a further sort.

The point is - some jobs can be done better without a computer, and many others can be done with a very simple little program!


[^0]:    The program requires Extended Basic, $32 K$, and at least one disk drive. An 80 column device or a Geneve is nice, but not required. The ability to program in 80 columns in XB is provided by Alexander Hulpkie's X-80 utility package. If you want to use the automatic dialing option you will also need an RS232 card and a Hayes compatable modem. A printer is also feal good to have, but not necessary if you only need to maintain a list of phone numbers, or if you don't need to print out addresses.

    The first thing you want to do -after- making a backup copy of the program and hiding the original awav.

