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SPC SOFTWARE COMPANY
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DATA BASE 1
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DATA BASE 1
INSTRUCTIONS:

GETTING STARTED:

This system is designed to do a number of complicated data storage and printout functions in an easy to use menu-driven format. In other words, simply input the number of the function you'd like and the computer will ask for the appropriate inputs and execute the functions.

Rather than go into a long-winded explanation of what to do, let's start by actually creating a sample data list.

* STEP 1:

Insert the program disk into disk drive 1. Power-up the system. Select Extended Basic and the automatic loader will take over. You will see:

1=RUN DATA BASE 1
2=RUN FORMLETTER PROGRAM
3=RUN UTILITIES PACKAGE
4=CATALOG DISK
5=PRINT DOCUMENTATION
You obviously know what option 5 does or you wouldn't be reading this.
Option number 4 is simply a disk catalog program. To see how this works, press number 3 on your keyboard. The screen clears and the program asks what disk drive. Enter the number 1 to see what's on the program disk. Press the space bar to return to the menu screen.

Now, select option number 1. You will be asked if default options are O.K. If you want to change the screen color combinations and/or use true lower case letters, input "N" when asked about default options. You'll then be instructed on how to make a variety of changes. The program will now load the DATA BASE 1 main program. You will be asked to input:
"NAME OF LIST (ALL CAPS)"
Let's now create a list called "DUMMY". Type in the word "DUMMY" and press enter. Note, you are limited to 8 characters in the list name.

Now the computer asks what disk drive you will have the file disk in. If you have one drive, press enter, otherwise, input disk drive number 2 or 3 for the file disk drive.

NOTE: If you have a single disk drive, remove the program disk before pressing the space key and put the file disk in. DO NOT USE the
program disk to store files.
If you have multiple drives, make sure the file disk is in place before pressing the space bar.

When everything is in place, press the space bar. The disk drive will engage and look for the file named "DUMMY". When it does not find it (because we haven't created it yet), the computer tells you one of two things has happened:

Either you don't have the right file disk or file name, or that the file has yet to be formatted. In this case, because "DUMMY" is a new file, we now have to format it. Press number 2 to format the new file.

FORMATTING A NEW FILE:
(ALSO MAIN MENU OPTION 5)
The formatting section simply allows you to alter the standard formats to fit your needs.

The format screen tells you to change any item headings by entering the line number, then the change. As you can see, you start with the cursor at the bottom of the screen awaiting an input.

The ten numbered lines represent the DATA BASE 1's built-in line prompts. Each of these ten lines represents what goes on each line for each record. In other words, the information on the ten lines makes up one record.

In the case of the built-in format, line 1 is for first name, line 2 is for last name, line 3 is for company, etc. Use this format if you can (there is a built-in printout option that takes this format and prints a 4-line label).

If you will be printing mailing labels, there are two other built-in print-out formats. They are:

1: The first three lines will be used to print a three-line label. In this case, whatever is on line 1, 2 and 3, will be lines 1, 2 and 3 on the mailing label.

2: The first 4 lines will be used to print a 4-line label. In this case, the first 4 format lines will make up the four-line label.

If your needs do NOT fit into one of these three formats, don't worry, you can make up your own print-out combinations.

NOTE: Please keep in mind when figuring out what should be on what line that:

1: If you will later be searching for or sequencing a list by a particular item (zip code for instance), make sure it is on its OWN LINE. If alphabetizing by last name, make sure the last name is on its own line, or at least is the first item (EG: Smith, Joseph).

2: Also keep in mind any form letter uses you may be considering. If you want to write a letter that will say, "Dear Mr. Jones", you can't have the first name on the same line as last name, and you may need a separate line for "Mr.", "Mrs.", "Ms.", etc.

3: Don't put too much on a line. The maximum length of each input line will be 28 characters. So, there probably won't be enough room on one line for "First Name", "Last Name", and "Company".

4: If you're going to be doing mailing labels, remember you are limited to the number of characters you can get on one label (usually under 40).

Now that you know what will go on each input line, its time to change the ten lines to your own format.

IMPORTANT NOTE: Please do not get confused with inputing data at this time. All you are doing right now is telling the computer what type of information will be on each line. The actual inputing of names, addresses, etc. occurs later. If this was obvious, excuse the simplicity of this explanation. If this was not obvious, join the majority.

If you want to change a line, first input the line number (the cursor will move to that line). Then, write over, or erase what's on the line and input the new line prompt. Hit enter and the cursor will return to the bottom of the screen. Keep inputing the line number and changes until the lines match your own format.

NOTE: If you only need five or six lines, no problem. Leave the rest blank, or just ignore them for now.

After you have the input lines how you want them, enter ZERO. This will save the line prompts as you created them.

Now the computer asks you what the maximum length of each set of ten items will be. This is how you will decide what to enter:

It is advantageous to select a maximum length total that is the smallest possible, but will still accept the maximum length record you will encounter.

NOTE: This total is for all the lines you'll be using added together. On a piece of paper, figure out how much space the average input will be for each line. For example, on the built-in format, we'll allocate 8 letters for first name, 10 for last name, 20 for company, 20 for address, 20 for town and state, 5 for zip code and 12 for phone number. We'll leave the last three lines blank.

That adds up to 87 total characters per record. Simple right? Not quite. 87 is not an efficient record size. What does that mean?

NOTE: The way disk drives record information, all records will be saved in whole on one disk sector. Rather than explain the inner workings of a disk drive, take our word for the fact that a record dividing evenly into 256 will make maximum use of disk space. And
also note that any record size you input will increase by ten when saved on disk. Now you're really confused, right?

All this means is that the block sizes listed on the screen are the most efficient. Select one of them.

The difference will be how many records you can save per disk. A normal, single-sided disk drive has 360 sectors. A record size of 75 will allow around 1000 records to be stored per disk.
** MAJOR SUGGESTION \#1: Select a record size of 53, 75, or 117. If you must go over 117, you may as well input 245 for the maximum length of each set of ten records (even if you're using less than ten lines).

NEVER INPUT A RECORD SIZE OVER 245!

SPECIAL NOTE: The DATA BASE 1 system does NOT restrict you to a specific number of characters PER INPUT LINE. Only the TOTAL LENGTH of the record is limited. Therefore, average lengths of input lines should be used in figuring input lengths. And it's O.K. if one line takes up more than normal, because the odds are another line will be shorter than normal.

* REMEMBER: If you may be adding extra data lines later, you must accomodate that added record length now. Once a record length is entered, it cannot be changed. If you're not sure how much you'll be adding later, it may be better to select 117 as record size even though it will cut down on the number of records you'll have room for on your disk.

After you've input the maximum size of each set of ten records, you'll be asked how many lines you'll be using. Input 7 lines for our DUMMY file.

NOTE: You can easily add lines later, so don't worry about adding extra lines now, just input the number you actually need.

Now, the format section asks the name of your printer. Input in CAPS, "PIO" for a parallel printer, or the appropriate RS232 serial information for your printer. Now input what will be the maximum charaters across your printer can print (EG: a 10-inch printer will print a maximum of 132 characters in the condensed print mode).

Now tell the computer what line will be the "KILL LINE". This is the line that will be used to kill uneeded records later. This is explained later. Right now, pick line 7.

MAIN MENU:
You may have noticed that after finishing with the formatting section, you got your first look at the program's MAIN MENU.

As a demonstration, you should now turn off the computer and start all over again to see what happens now that you've formatted the list called "DUMMY".

Re-load the program disk and follow the start-up procedures. Notice that after you input the list name "DUMMY" and press the space bar, you come right to the MAIN MENU. That's because you've already formatted the file named "DUMMY", and the program remembers the info you entered in the format section.

Now that you see the MAIN MENU, you can see the various program functions offered. The most logical to start with is. "2=ADD NAMES TO LIST". Press 2 and we'll start to input some data.

MENU OPTION \#2
"ADD NAMES TO LIST"

The screen you see in this section is easy to understand. The top line simply instructs you to "INPUT RECORD NUMBER 1". The number will increase by one each time you enter a record.

Then, you're told what to do if you make a mistake, or you're done entering new data. "LAST IN:" will list line 1 of the last record you input. If it was "John Jones", that's what will appear.
"SECTORS ON DISK:" tells you how many sectors remain blank on your disk. This is so you know how much room is left for adding records to your file.

The lines numbered from 1 to 10 (or however many lines you're using) will display the information you input for each line. As each line is entered, it will appear on the appropriate line number.

Finally, at the bottom of the screen, is the input prompt and the cursor. The prompts you created in the format section will now appear one by one telling you what information to enter.

Try it. Enter some dummy records so you can get used to inputing data. Input the information as the computer asks. If you make a mistake after entering a line, simply type in "MIS" and you'll return to the first line. Hit enter for any line you don't want to change and when you get to the error line simply use the computer's built-in function keys to correct the error.

NOTE: Once you've entered the last line of a record, you can't correct it using this part of the program. Write down the record number and we'll change it later using MAIN MENU option 3, "CHANGE RECORDS".

If you try to enter a record that is longer than the maximum length allowable (the number you entered in the format section), the computer will honk you with a buzzing sound and tell you the record is too long. It will tell you how many letters must be removed.

You will then automatically be returned to input line one. Look over the record lines on the screen and decide where the listing can be cut down. Go to that line by hitting the enter key and making the changes necessary to reduce the size of the record.

Most times, all that's needed is to change "Company" to "Co." or changing "Street" to "St.", etc. Re-enter each line and the computer will then add the record length again to make sure it fits. If it does, you'll go on to the next record.

IMPORTANT: When you are done entering data to your list, type in "END" on the first line input. This will close all files, add up your total number of records, and return you to the MAIN MENU.

THIS MUST BE DONE BEFORE ENDING THE PROGRAM OR DATA CAN BE LOST!

NOTE: If you accidentally crash the program before entering "END", you will only lose the last two or three records you input. This is no great problem. BUT, you will lose the new total count of the list. This means that when you come back to the program to enter new names, the total number of records the program recognizes will equal the total the LAST TIME YOU SUCCESSFULLY ENTERED "END".

In other words, if you had ten records already in the file, and added ten more, but crashed before entering "END", the program will think you only have ten records.

To correct this, simply go to MAIN MENU OPTION 1 (explained below). By reading all records to the end of the file, the program will automatically correct the record totals. Do this if you suspect the record totals are incorrect.

Of course, unless you have a total system crash or blackout, entering "END" will be all you need to close all files and return to the MAIN MENU.

Hopefully, by now -- or within the next few minutes -- you will have entered 4 or 5 dummy records into our practice file called "DUMMY". After this is done, we're ready to start processing the data you've entered.

MENU OPTION NUMBER 1:

READ RECORDS...
Now that you've input some data, let's read some files. When you are at the MAIN MENU, select option 1, "1=READ RECORDS". You are then asked if you'd like to read all records, or a specific record. For now, let's Press 1 for all records.

Now the computer asks which line you'd like to read. This allows you to create a listing of one line from each of the records. In the file called "DUMMY", we can read all company names, or all last names, or all cities and states, etc. by entering the corresponding number.

In this case, ENTER 3 and see what happens. The page of information that's created lists the third line of each record in succession preceded by its record number. After the bell sounds, the computer asks if you want to do this routine again (with a different line
perhaps), if you want to read a single record, or if you'd like to go back to the MAIN MENU.

For the moment, press number 1 to start the process over again. Now when the screen asks an input, press 2 to read a single record and input a record number.

NOTE: You will now end up in the same program section as if you selected MAIN MENU item number 3, "3=CHANGE RECORDS". Obviously, it is only logical that we now discuss the 3rd MAIN MENU option. MAIN MENU OPTION \#3

3=CHANGE RECORDS...
You can enter this program section by selecting MAIN MENU option number 3, or as described above. If you enter from the MAIN MENU, the first question you're asked is what record you want to start with. Input any number less than or equal to the total number of records and a screen resembling the one below will appear:

REC 1=NEXT RECORD; 2=CHANGE
1 3=BACK; 4=NEW RECORD

1) Stephen
2) Flanagan
3) SPC Software
4) Box 121
5) Brightwaters, NY
6) 11718
7) 516-587-5462
8) Program Designer

The top left refers to the record number you're reading on the screen. Pressing 1 will display the next record on the screen. Pressing 2 will allow you to change any or all of the record lines (1 to 10).
Pressing 4 will allow you to input the next record you want to see. 3 simply sends you back to the MAIN MENU.

Lines 1 through 10 (or 1 through a number less than 10 , depending on how many lines you're using) list the contents of the record currently being displayed.

Experiment with the various number inputs to see what happens. When you press 4, the computer asks "WHAT RECORD?". Whatever record number you indicate will then be displayed.

Note what happens when you press number 2 for CHANGE. Now the screen looks approximately like below:

REC 1=NEXT RECORD; 2=CHANGE
1 3=BACK; 4=NEW RECORD

1) Stephen
2) Flanagan
```
3) SPC Software
4) Box }12
5) Brightwaters, NY
6) }1171
7) 516-587-5462
8) Program Designer
-----------------------------
    1 FNAME 2 LNAME
    3 COMPANY 4 ADDRESS
    5 CITY, ST 6 ZIP
    7 PHONE 8 DATA
    9 DATA }10\mathrm{ DATA
    1 1 ~ A L L ~ 1 2 ~ R E C ~ \# ~
WHICH ITEM TO CHANGE?
```

The computer is now asking what you would like to change on this record. If you only need to change one line, input the number of that line. The lower part of the screen will blank and you will be asked to make any change. If you input 11, the computer will ask you to change all the lines. Pressing 12 allows you to change the record number of the current record.

NOTE: Changing the record number does NOT erase the record from the current record number, but only copies the record to another record location. It is mostly for duplicating records, or if you create a file that is on the disk in a particular order, it allows you to insert a record.

NOTE: Whatever record currently occupies the record number you indicate is erased. USE THIS OPTION WITH CARE!

After you have made changes in a record, the chages are then redisplayed on the screen so you can inspect the new record for additional changes. If it is O.K., pressing any of the other options listed at the top of the screen (1,3 or 4) will enter the record to the permanent file.

When you're done making record changes, simply enter number 3, "BACK", to return to the MAIN MENU.

NOTE: If you are reading the last record on a file, pressing 1 will return you to the MAIN MENU screen (because there is no next record).

* KILL FUNCTION: Because there is no provision for physically erasing a record from the disk file, there are only two ways to ignore records that you are no longer using: 1) Write over that record with a new one, or; 2) Place the word "KILL" in the kill line (the line you specified in the format section) of the record. If the program encounters "KILL" in the kill line of a record, that record will be ignored in any printout functions of the program. These records, however, WILL be read in the CHANGE RECORDS, READ RECORDS, and SEARCH functions of the program. By listing the kill line of all the records using MAIN MENU option 1, you can find "killed" records to write over
when you want to enter new records.
* NOTE: You can enter up to 28 characters on any one record line (the same number as in the ADD NAMES TO LIST section. But, in the screen printout of each line (1 to 10), you can only see 23 characters. The end of a long line, therefore, will be clipped on the screen printout, but EXISTS ON THE FILE and for all printouts as it was entered. If you enter a 28 character line and only see 23 on the screen, do not fear, the whole record is there.

MAIN MENU OPTION 4

PRINTOUT...

Now we get to the powerful data manipulation section of the DATA BASE 1 Program. Printouts of information can be done in a multitude of ways depending on your needs. There are three built-in printout functions designed to print mailing labels, but you are NOT limited to these formats.

You can print column lists of data (EG: column 1 could have name, column 2 could have company, column 3 could have city and state, etc). You can print alphabetical listings of data with accompanying record numbers as they exist on the disk file (this allows you to look up a listing alphabetically, find the record number, call up menu option 1 and list that record in seconds for changing or simply reading the data). You can print mailing labels on formfed sheets with up to five labels across. You can have printouts done alphabetically, in zip order, by decending order of dollar sales, etc. You can even print out portions of your list (an alphabetical list of everyone from from New York, or a particular city, or zip code -- even all the people on your data base named "Robert").

Because of the infinite combinations of data and custom printouts, this docmentation will offer some examples on how to do various printout styles. After you understand these examples, you can experiment and change things to suit your needs.

Let's give it a try.
Select Option 4 from the MAIN MENU.
The first question you're asked is what print format you'd like to use. Press Number 1 and you'll see the STANDARD print format. This format simply prints out the information as you originally entered it. If you have 6 lines of data per record, this format will print out all six lines sequentially, one item per line.

So we can easily explain the rest of the basic printout section, press number 1 for now. We'll keep it simple for the moment.

The computer now asks you "WHICH LIST PRINTED? 1=DATA LIST AS IS. $2=$ SEQUENCED LIST". Because we have yet to sequence the list, select number 1. This option prints out all the records of the file in the order they were entered. This is the fastest printout option because
the file is read sequencially, so use it for first class (unsorted) mail lists and other data were order does not matter.

Now the computer asks "USE LINE MATCH OPTION (Y/N)?". Might as well explain this one now.

LINE MATCH OPTION simply let's you printout records falling into a certain category. If you only wanted to print out people from the state of New York (NY), you would ENTER "Y" for the line match option.

The program will then ask how many match items you will have. In other words, you can use multiple matches to print or find a record. If you say 2 matches and choose "NY" and "CA" on the appropriate line, a printout will search for records from New York AND California.

The computer will ask what line you want to match and will ask what match -- input "NY" or any other match item.

After you have entered the number of matches and what they are, the program will want to know what combination of these matches are to be printed. You can have record printed if ANY of the match items are found, or will only print if ALL the items exist in a record. This is a very powerful system for segregating just those records you want. Experiment with this feature. It will be useful.

NOTE: Line match is a segment string search. What's that? This means any combination of NY encountered will be interpreted as a match. If the City is on the same line, it does not matter, if "NY" is on that line, it will be a match.

* NOTE: Because this is a segment string search, if you want to match "Smith", the following will be considered a match: "Smith", "Smithson", "Smith \& Sons". If your input is all caps, say, "SMITH" then these words will also match: "GOLDSMITH", "BLACKSMITH", "SMITHINGTON", etc. So be careful on how you match.

This is especially a problem with matching dates. If a date is entered as 1/9/84, and you want all the listings from January, your match will be a problem. If your match is "1/", not only will "1/10/84" be picked out, but so will "11/20/84" and "2/1/84".

The bottomline is to separate any data when being input so it won't conflict with any sorts you'll be doing. The answer to the January match problem is an original line input for date of: " 01/01/84". Note the space before the "01", Now, when you want to match the month, enter " 01" (preceeding space) for January. If you want the day of the month, enter "/01/" with both slashes. Year is no problem -- no month or day will equal more than 12 or 31 respectively. This becomes a problem starting in the year 2001. By that time, we're sure you can come up with a solution for pulling out the year 2001.

After deciding whether to use the line match option (by entering $Y / N$ ), the computer will now ask you where you want the printout. Your options are to the printer, format for TI Writer or to the screen.

If you want the printout on paper, select option 1 . If you don't need
a printed record of the printout, select option 3 to print to the screen.

Option 2 takes a prinout and writes to a disk file that can be read using the TI Writer Word Processor program. In this case, nothing prints to screen or printer. You have to read the file later with TI Writer. If you select this option, you'll be asked where you want to write the new file (what disk drive -- obviously, if you have one drive, that's where it goes). You can't take out the file disk, however, so if you have one disk drive, the new file will write to the same disk. Make sure you have room on the file disk before doing this.

And remember that TI Writer only uses an 80 -column line. Formating a line longer will cause problems.

The file created using this option is the same name as your data file, but with the letters "DV" added to the front. Our file named "DUMMY" would create a TI Writer file called "DVDUMMY".

This option is mostly used for creating lists that will be part of some text that will be created with TI Writer (an alphabetical, column list of customers, club members, or even statistics, etc.).

Enough on this option. If you have an application, experiment with different printouts to see what can be done.

Assuming we chose to printout to your printer, let's go on and do some printouts.

Some of the commands that will appear on the screen are self explanatory. We will only discuss items needing clarification from this point forward.

If you have any printer commands, the format for entering them (once you ENTER "Y" to do so), is "\#,\#,\#". In other words, you must enter three numbers separated by commas (EG: 27,69,0 -- will enter the emphasized type mode on some parallel printers). Look up any print commands in your printer instruction book. These are number-only inputs. The computer converts them to character string inputs. If a printer command is a single number, input zeros for the other two numbers.

This option allows any type style or size to be used for your printout. Also note that you will keep returning to the printer command section until you enter "N". Any series of commands, therefore, can be strung together for full use of yor printer's capabilities.

Naturally, if you don't input any print commands, your printer will printout in its powerup mode.

* NOTE: If you get any kind of error message having to do with the printer, go to the format section and re-input the printer name to make sure it's correct. Do the same if you change to a different printer.

Now the computer asks you how many labels you want to print across. The printout does not necessarily have to be for labels, however. This option simply allows you to print up to five records across the sheet. If the printout is for labels, there is a speed advantage in printing more than one label per line. On a regular 10-inch printer, you should be able to get labels up to at least three across. For 15-inch printers, five-across labels can easily be used.

For demonstration purposes, select 3 labels across. Now the computer asks you to set the tabs for each label (or printout item). NOTE: Most 10 -inch printers normally print across 80 columns. You can, however, allow up to 132 characters across the screen in the condensed type mode, 96 in elite. Use the printer commands for you printer to enter these type sizes.

Remember that if your tabs are too close together so that one line runs over the next tab, the printer will skip a line to get back to the right tab setting. By keeping each line of a label below 28 characters in length, and the tabs between labels more than 28, you should be able to match the tabs to whatever label sizes you have. The only way to find out what fits your set of labels is to experiment with different tab settings, etc.

Now that you're totally confused, the computer will ask you how many records you'd like to print this time. If you're just experimenting to test different tabs, etc, put in just enough to run a set of labels across the page. For now, input 6. This should print two rows of 3 labels across for the 6 total records (of course, if your file only has five records, that's how many will print out). As a matter of fact, if you want to printout the whole file, input a number greater than the number of records (if you have 500 names on a list, and want them all printed out, input 600 or more for NUMBER OF RECORDS TO BE PRINTED THIS RUN).

If you are using sheet fed labels, and there are only 30 labels per sheet, input 30 labels and the printout will pause after printing 30 records so you can load the next sheet of labels (or stationary if this is a listing printout).

The next question will be, "START AT WHAT RECORD?". If you want to start the printout with the first record, press number 1. If you've already run the first 200 records, and would now like to print the rest of your records, you can start with record 201, etc.

As soon as you press enter for the record number, the computer gives you time to line up your labels or stationary. The message, "PRESS SPACE BAR WHEN READY FOR PRINTOUT" appears.

Press the space bar and your printer will start working!
There you have it, your first DATA BASE 1 printout. The instructions are long, but once you're used to it, it will take only a minute or so to set up even the most complicated printout.

After the printout is done, one of two things happens on the screen.

1) If you've printed the whole file, you will return to the MAIN MENU.
2) If you've only printed out part of the file, you will be given the option of "PRESS 1 FOR NEXT PRINTOUT" or "PRESS 2 TO ABORT PRINT COMMAND". If you press number 1, the computer will continue the print operation where it left off (EG: if you printed 30 labels, it will now ask you how many more to print and will start doing so at record 31). If you press number 2, the print command is aborted, all files are closed, all printout instructions are erased, and you are returned to the MAIN MEMU.

* NOTE: If you are printing to the screen, the screen described in the preceding paragraph will not appear until you press enter to clear the printout. There is no screen prompt to tell you when a screen
printout is done. Once the disk stops, however, you'll know its done. When you press any key, the options described above will appear.

You have now completed your first printout of your new file. Easy isn't it? Maybe not yet, but it soon will be.

After you master this form of printout, we can start getting fancy by selecting some different options.

SCREEN PRINTOUTS...

The easiest new option is to have the printout go to the screen instead of the printer. When asked where you want the printout, simply select the screen and the same thing will happen on the screen.

BIG NOTE: If you are printing to the screen, remember that you don't have 80 columns to play with, but only 28. In other words, don't select more than one listing across because only one will fit. If you do select more than one, the printout will still take place, but not how you formatted it. You may end up with all first names printed out, then all last names, then all addresses, etc. To make things easy, only select 1 LABEL ACROSS when printing to the screen.

Why print to the screen in the first place? If you are simply looking for a limited number of records, or simply want to read an alphabetical listing, or a listing of sequential values (say dollar sales by a customer), maybe all you need is to see the data and don't need a print out, etc. Other applications will become clear as you use this program.

SEQUENCED PRINTOUT...
Another change in print options will allow you to print an alphabetical listing, or a listing by number values (zip code for instance). A sorted list is called a "SEQUENCED LIST". You can printout a sequenced list by selecting that option when asked "WHICH LIST PRINTED?". This will then take a list that has been sequenced using MENU OPTION 6 (which will be discussed later). After making the
"SEQUENCED LIST" selection, the computer will ask you what line you will use to sequence by. If you pick the line with "LNAME", you will get an alphabetical printout by last name. If you pick the "ZIP" line, you'll get a list printout in zip code order.

NOTE: The list must be sequenced before running the printout (using MAIN MENU option 6). If it is not, you will be notified by the computer. In other words, if you're not sure if you sequenced the list yet, you can still select the sequence option and then do the sort at that time. Don't forget to see details for running menu option 6 to see how to sequence.

Now to get even more fancy! By combining the SEQUENCED LIST option with the LINE MATCH option, you can print out an alphabetical (or zip sequenced, etc) listing of everyone with a certain LINE MATCH (such as everyone from NY state, everyone with the name "Robert", everyone from "Chicago" or in the case of one fireman and his list, an alphabetical list of all firemen who are also "EMT" -- Emergency Medical Technicians). In other words, you can do a double sort at the same time.

To do this, first select the SEQUENCED LIST option. After doing this, a list of what's on each line in a record will appear. You are asked if you would like to use the LINE MATCH option. Enter "Y" to do so.

Follow the appropriate directions for using the LINE MACTH option. Now, you will have a sequenced listing of only those records matching a certain line item.

* It's a good idea, therefore, that if you do have subfiles within your master file, include some code (such as the fireman's "EMT") that will separate that record from the others.

By combining the various print options, you should be able to create an infinite number of results from this program. We suggest you experiment with a small, DUMMY list of 10 or 20 records so you become familiar with the various results. There's no way we can anticipate all the needs of everyone, so please experiment.

CUSTOM PRINT FORMAT...

There is one powerful programming option that must be explained separately -- the custom printout option. This CAN get a little complicated and confusing. In short, this option allows you to custom taylor a printout to your needs. It can be used for simply putting together labels that contain certain mailing codes, putting together cross-reference lists of your disk files, or in creating column listings of your records by line category. Following are instructions and uses for each of these items. By seeing how these printouts are created, you should be able to figure out any other combination you may need.

THE CODED LABEL...
We've all seen mailing labels that have a series of code included on the top or bottom line. In that code is information on subscription
dates, billing details, mailing routes, etc.

If you do mailings that must include different types of letters or other inserts, you can have a code line printed on a label, so you'll know what should be included in what envelope.

It's very easy to do this.

Select MAIN MENU option 4. When you come to the part where your asked "WHAT FORMAT", select option 4 for "CUSTOMIZED PRINTOUT".

Now you're presented with a new screen. Lines 1 to 10 (or however many lines you're using) list what's on each line of the record file you're using. As you'll note, there are three extra line numbers: 11=" "; 12=", ";13=REC \#.

You also are presented with a "1" and a blinking cursor. Here's what's happening:

You are now being asked to create a custom print format with the following limitations: you can have up to 8 items on any one print line; you can have up to 6 lines for each printout; and you can have any number of lines between printout records (including 0).

Imagine the configuration below:

```
PER
```

LINE \# ITEM NUMBERS LINE

| --------------------------- |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| LINE | 1 | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ |
| LINE | 2 | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ |
| LINE | 3 | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ |
| LINE | 4 | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ |
| LINE | 5 | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ |
| LINE | 6 | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ | $\#$ |

Try this: Press 1 then ENTER; Now enter zero 7 times. Press 2 and enter; Enter zero 7 times. Press 3 and enter; Enter zero 7 times. Press zero.

You should now have a screen that looks something like below. This is the input line for a standard 3 line label:

| 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 0 |  |  |  |  |  |  |

What you've done is input the number 1 as the first item in line 1 and zeros for the other 7 positions. You automatically moved to line 2 and entered 2 for the first item on line 2 and zeros for the other 7 items, and on line 3, you input 3 and then 7 zeros.

By entering 0 on line 4, you told the computer you were finished. It now knows you have created a 3-line label and knows what goes on each
line.

NOTE: The computer doesn't care what you put on any line. Item number 10 can be on line 1, etc., or you can have as many as 8 items on any one line.

After entering zero on line 4, the computer now asks "HOW MANY LINES BETWEEN LABELS". The standard for most mailing labels is 4. Enter 4 and you'll have the standard. If the spacing is different for your labels, enter the appropriate number

Now that the computer knows how many lines to skip after printing each label, it asks "HOW MANY ITEMS ON LINE 1". If there is one item on the line, enter 1 , if more than one, enter the appropriate number. DON'T FORGET that a space (11) and comma (12) are considered an item on the print line. Include them in your line count. The cursor will be stationed at the right of each line as this is input.

After all the data is entered (don't be nervous, the whole process only takes a minute or so on the screen), the screen will look something like this:
-----------------------------
1 =FNAME
$2=$ LNAME
3=COMPANY
$4=A D D R E S S$
5=CITY, ST
6=2IP
$7=$ PHONE
11=" ";12=", ";13=REC \#

| 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4 | 0 |  |  |  |  |  |  |  |  |

LINES BETWEEN LABELS? 4
HOW MANY ITEMS ON LINE 3
CORRECT (Y/N)? Y

After entering "Y" indicating that all the info is correct, you are asked the name of this print format. Enter a name and the format will be saved on disk. By saving it, you'll no longer have to create the format each time you need it.

REMEMBER the name of the custom print formats you save.
You are then returned to the regular printout section of the program and you would now progress the same as if you entered a built-in print format.

NOTE: Input option 11 inserts a space between items on the same line. This is used between first name and last name, for instance. Line input option 12 places a comma and a space between items (between city and state, for instance).

What about that mailing code? Simple. Let's say the code is on line 7 of your record file, here's what the label input would look like:

| LINE | 1 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| LINE | 2 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LINE | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LINE | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LINE | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Note what's on LINE 2. If you want a blank line, you still have to put something on the line because the computer will only print the line if something is on the line. In this case, 11 will print a space.

The result? A label that looks like this:
0384
Steve Flanagan
Box 121
Brightwaters, NY 11718
The first line may be an expiration date of March 1984 or that's the date to send a letter, etc. You can come up with your own code.

CROSS REFERENCE LIST...
Now for an important application of the DATA BASE 1 program. One of the biggest problems with any data base system is finding a particular record so it can be changed or eliminated. If you have a list that requires constant updating for billing, letter sending, invoicing, etc. you need to find that record quickly.

What if you had an alphabetical listing of all your records on a file, cross-referenced by record number? This would allow you to look up a name or company, etc. alphebetically, read the record number and call up the record using MAIN MENU option 3. This method allows record retrieval and changes to take only seconds.

Here's what one alpha printout would look like:

| 21 | Allied Company | Misner | 0684 |
| :--- | :--- | :--- | :--- |
| 73 | Blue Ribbon Company | Krantz | 0784 |
| 44 | Chicago Company | Daskas | 0784 |
| 91 | Dold Inc. | Ritter | 0484 |
| 75 | Gelson Inc. | Houghton | 0584 |
| 57 | Kreck \& Company | Burwell | 0484 |
|  |  |  |  |

The information is listed alphbetically by company name (column 2) and includes the last name of the person at the company (column 3) and a date (column 4) to be used as an expiration date or date to contact, etc.

Column 1 is the record number of that company as it sits on your disk file. If you have to change a record for a particular company, look it up and note the record number. Now, using MAIN MENU option 3, you can instantly read and or change that record. Here's how you get this type of printout:

Go to the "CUSTOM PRINTOUT" section in MAIN MENU option 4. Now, using what we've learned about entering a custom prinout, LINE 1 will look like this:

LINE $14013 \begin{array}{llllllll}1 & 2 & 7 & 0 & 0 & 0 & 0\end{array}$
LINE 20
The number 13 will print the record number, 3 will print company, 2 will print last name and 7 will be the line containing the date. Four zeros are entered to close out the line. When the computer asks LINES BETWEEN LABELS, enter zero.

When asked how many items on line one, enter 4.
Name this prinout format "RECNUMS".
Now you'll notice something a bit different in your printout options. You are asked something new: "USE COLUMN FORMAT (Y/N)?"

You may have wondered when creating this printout line how spaces would be put between each item to create the various columns. Answering "Y" to this question is how. When you type in "Y", a screen like below will appear:

| ITEM | COL |
| :---: | :---: |
| REC \# | 1 |
| COMPANY | 10 |
| LNAME | 40 |
| DATE | 60 |

You are being asked to input the column starting point for each column in the printout. In the illustration above, REC \# will start at the first column; COMPANY will print starting as column 10, etc.

After making sure that all the data you've given is correct, you will be asked how many records to print. About 60 lines will fit per standard print page.

When the printer starts printing, you will have a column printout in alphabetical order with appropriate record numbers.

Of course, you don't have to use REC \# if all you need is a columned printout of a particular list. Use your imagination. You can create
any combination of column lists, providing your custom printout format has all items on the first line.

By combining all the various printing functions in this program, you should be able to take care of all your data printout needs.

HELPFUL HINTS

* Don't forget your printer's skip the perforation or page length commad for long printouts.
* Keep in mind the limitations of your printer. If it can't go more than 80 columns, the results will be unpredictable if your format exceeds that limit.
* When formatting for TI Writer, remember that it cannot format past 80 columns under any circumstances.
* You can fool the system and your printer by using "unorthodox" line inputs. For instance, if 2 items are given the same column setting, a line will be skipped and the second item will print directly underneath it. This drives your printer crazy, but should work.
* Don't forget that you can use any print style on your printer. In double width, emphasize mode, you could even print up badges with people's name, company and home town on them. To do this, skip a line between each print line (by entering 10 - space) and skipping about 20 spaces between labels. Input the appropriate printer commands when asked. It's easy.
* Don't be afraid to experiment. Get some junk paper, put it in the printer and start playing around. You'll get the hang of it pretty fast.

MAIN MENU OPTION NUMBER 6

SEQUENCE...
Sequencing a list either alphbetically or numerically is very easy. The only limitation is the total number of records. You can only sort a list with 1000 or fewer records.

* NOTE: It's a good idea to keep each list you create under 1000 total records. If you must sort, keep under 1000 or an error will occur.

You can sort any line alphabetically (even a line with numbers) . Zip codes, for instance will sort alphabetically. If, however, you are doing a number sort and any record contains a non-number, the sort will crash and you'll be presented with a error message. So, before doing a numeric sort, make sure only numbers are on the appropriate sort line (no commas, punctuation or other symbols).

The ALPHA sort uses a different portion of the sort line depending on how many records are being sorted. With 1000 records, only the first 4 characters are used, so "Smith", "Smithson" and "Smith \& Sons" will
have the same value in the sort because only the "Smit" will be recognized by the sort. As the total number of records gets smaller, more of the characters in a line are used in the sort. If you have under 500 records, the complete string is sorted. The only reson for this is the memory configuration of the 99/4A. String memory is limited even with memory expansion.

Having said these things, the rest is easy. Simply input the options asked for and the sort will be done.

The only two options are if you want an alpha or numeric sort, and if you want the printout in ascending or decending order. The computer does the rest. It will tell you what's happening as it does it.
** NOTE: The sort built into DATA BASE 1 is a RAM sort that will NOT affect the order of information on your data file. When the sort is complete, a file of record numbers is stored on disk. REMEMBER THIS when creating your main file. YOU MUST LEAVE SPACE ON THE DISK FOR YOUR SORT FILES!.

How much space? One sector of space will be required for every 28 record numbers stored. A file of 280 records, therefore, requires 10 sectors for a sequence file. 560 records needs 20 sectors. 1120 records needs 40 sectors.

And each line sequenced has its own record number file. If you will alphabetize by name AND do a number sort by zip code, you need two record number files. Leave the appropriate space on disk.

As a general rule, leave 80 sectors or more open on a single sided disk with 360 sectors, and 160 open on a double-sided disk.

MAIN MENU OPTION 7

SEARCH...
The SEARCH function allows you to do a high speed scan of existing records in your file. There are three options when you enter this function area:

1=CREATE RECORD FILE
2=FIND RECORD
3=BACK

Inputing 3 simply returns you to the MAIN MENU.
Pressing 1 will allow you to create the search file. Enter 1 and you are asked what line will be used for the search.

If you use line 3, for instance, the computer will create a file that has the first 5 characters from line 3 in a mini file. The disk drive will access and create the file. You only have to do this once (or to update the file after additions to the list have been made).

Now, you can select option 2 to FIND RECORD. When asked what string
being searched, simply enter the first 5 characters of the record you're looking for. If the company name is "Joe Blow Inc.", input "Joe B". The disk drive will ingage and the disk controller light will go crazy. Because more than 40 of these mini records are stored per disk sector, you are now doing a "virtual memory" scan for the record you indicated.

As a benchmark, you should expect the 200 th record to appear on the screen in about 35 seconds; 400 th in 70 seconds, etc.

Only use this option if you have no idea what the record number is you're looking for. If you have an alpha list of your records with the corresponding record numbers, use that method of searching for a record. The search option is handy for small lists (under 250) and if you have no idea where the record is you're looking for.

After the record is displayed on the screen, you're asked to confirm that its the record you want (because more than one record could have the same first 5 characters). If it is NOT the right record, press 2 and the search will continue. If the record is not found, you will be asked if you'de like to search for another record or return to the MAIN MEMU.

If you input number 1 because the right record has appeared on the screen, you now have some options:
"1=AGAIN; 2=BACK; 3=CHANGE"
Pressing 1 allows you to input a new search string; 2 returns you to the MAIN MENU; 3 will transfer control to the CHANGE RECORDS option from the MAIN MENU. Rules from that section then apply (see documentation from that section for details).

NOTE: Once you've created the search file, it does not have to be changed unless you make additions or changes in your list. Update the search file periodically. Under normal circumstances, you'll simply be entering a string and the search will begin. You DO NOT have to create the files each time!

MAIN MENU OPTION 8
START PROGRAM...
This option simply wipes the slate clean and restarts the program. If you are working on different files, change to a new file by starting the program over. You CAN'T read another file without reentering its name and reloading its particular file characteristics.

MAIN MENU OPTION 9
END. . .
FORMLETTER UTILITY...

When ready to use the formletter utility of DATA BASE 1, you must reload the program disk. The automatic loader will offer you the same start up options as for DATA BASE 1.

When you get to the selection screen, select option 2, RUN FORMLETTER. The FORMLETTER program will now load. After a few seconds, the program screen will ask:

```
WHAT FUNCTION...
1=PRINT LETTERS
2=END
3=RETURN TO DB1 MAIN MENU
```

Pressing Number 3 will access the disk drive and look for the program loader. If the program disk is NOT in drive 1 when this is done, an input/output error will occur. This is no big deal if you wanted to end the program. You can reload DATA BASE 1 or FORMLETTER by restarting your system (FCTN QUIT) or by turning the computer off and then back on. Pressing Number 2 will return you to the TI 99/4A title screen.

Pressing Number 1 will start the formetter program. You will now be asked if the formeltter you're running will be form fed or sheet fed. If you select Option 2, the computer will pause between formletter print outs so you can load the next piece of stationery or paper.

If you have formfed continuous paper, select the formfed option and formletters will printout continuously.

Now decide what disk drive number you will use for ALL of the FORMLETTER procedures.

Now the screen blanks and you are instructed to insert your formletter file disk. This would be the disk that has the formletters you've written using TI Writer.

You are now asked to input the names of up to 5 formletters you'd like to run with this program.

NOTE: You can load up to 5 different form letters at any one time using this program. This allows you to run a number of letters with one pass through the list you created with DATA BASE 1.

IMPORTANT NOTE: There IS a memory limitation for how long these letters can be. It is possible that if your formletters are long, or more than a page in length, you may NOT be able to load 5 formletters. The only way to tell how many you can fit is to try to load them all until you get a memory full error. At that point, you'll know how many to enter each time.

In most cases, a standard 1 page letter with right and left margins of 15 and containing about 25 lines of body copy will allow all five to load.

The form letter names you are expected to enter are the file names of letters you have saved with the TI Writer program.

Note: Any word processing program that creates a DISPLAY/VARIABLE 80 file can be used to create form letters for use with this program. In the case of some word processing programs (Extended Software's TYPWRITER for instance), there is an option to convert files to the TI Writer format. If you have one of these programs, you can write the letters that go with this program.

For advice on alternate word processing programs for use with this system, contact SPC Software, Box 121, Brightwaters, NY 11718).

After entering five form letter names or less (you can input less by typing in "STOP" when you're done), the computer will search for the formletter files and enter them into memory.

NOTE: If an incorrect name or non-existent file name is entered, an error will take place and the execution of the program will stop. You will be told that an error has happened and you will have to start over. Try cataloging the formletter file disk to make sure all the files are present and simply start over.

The computer will tell you what file it is inputing as it reads the disk. When all the formletters have been loaded, the screen will blank and you will be asked to "INSERT FILE DISK AND THEN PRESS ENTER".

Because this is a single disk program, you DO NOT have the option of using multiple drives. Remove the formletter disk from the drive you're using and input the disk holding the files created with DATA BASE 1.

Press ENTER when the file disk is in place.
Press ENTER when the printer is in the On Line Mode.
Now you are asked to enter the date for the formletters.

Now the screen clears and you are asked the name of the file containing the names and address of letters you are sending. Input the file name (EG: Using our earlier example, "DUMMY").

Now you are asked if you want to send the formletter to all on the list (option 2) or sort and match (option 1).

Obviously, if the letter is going to everyone, select 2, otherwise, selecting 1 will allow you to match up various records in your file with the various formletters.

If you want to sort and match, the following directions apply:
After selecting option 1, the disk engages and looks for the format file that was created with DATA BASE 1. That file will read what's on each line in your file (Last name, company, address, etc.).

Now, depending on how many formletters you have entered for printout, you are asked for some matchups.

The line below will appear:
MATCH LINE FOR: LETTER1 WHAT MATCH?
"LETTER1" represents the name of the first letter you entered to memory. This would be a letter you created with TI Writer or other compatable word processing program.
"WHAT MATCH?" asks for the word or code letters that will cause the formletter to be printed for that record.

If the letter is going to everyone in New York state, the MATCH LINE would be the line containing the state and the match would be "NY". The finished screen might look like this:

WHAT FILE NAME:
DUMMY

1 LNAME
2 FNAME
3 COMPANY
4 ADDRESS
5 CITY, STATE
6 ZIP
7 PD/C
8 INV\#
9 MR/MS/DR
MATCH LINE FOR LETTER 1: 5
WHAT MATCH? NY

Now you are asked:
REPLACE PROMPT (Y/N)?

This is a very powerful option for FORMLETTER users. This allows you to change record lines in your DATA BASE 1 file AFTER a formletter is printed.

An example would be if your file had a record with a line indicating what date a letter should be sent. After the FORMLETTER program prints the letter, you can change the file record to indicate that a letter has been sent, or when to send a new one.

An example of how this is used will explain it better.

EXAMPLE OF REPLACE PROMPT...

One company sends out collection letters to its customers. The letters are scheduled to go out two months after a bill is sent and once a month there after for three months.

The DATA BASE 1 prompts used look like this:

1) FNAME
2) LNAME
3) COMPANY
4) ADDRESS
5) CITY, ST
6) ZIP
7) $\mathrm{PD} / \mathrm{C}$
8) INV\#
9) $\mathrm{Mr} / \mathrm{Ms} / \mathrm{Dr}$

Line 7 holds the collection letter data. If a company has paid its bill, line 7 will have "PD" as a code indicating it has paid.

If a bill has just been sent, Line 7 will hold the code "C1 0384". This means collection letter 1 should be sent out in March (03 month) of 1984. Line 8 will hold the billing information: "\#1108 on 1/12/84". This means that we sent invoice "\#1108 on 1/12/84".

The screen matching to send letter "COLLECT1" would look like this:
1 LNAME
2 FNAME
3 COMPANY
4 ADDRESS
5 CITY, STATE
6 ZIP
7 PD/C
8 INV\#
9 MR/MS/DR
MATCH LINE FOR LETTER 1: 7
WHAT MATCH? C1 0384

After this information is entered as above, you will answer "Y" when asked if you wish to REPLACE PROMPT.

Now you are asked how many lines to change (up to 3). Input 1 because we are only going to change line 7.

Now you are asked if you want to replace what's on the line or simply add to it. In this case, we will replace by typing in "R".
"CHANGE OR ADD WHAT?" is the next question. We will replace the information on that line to: "C2 0484". This is the when the 2nd collection letter should be sent.

You are asked if all the info you entred is correct. By answering "Y", you are then asked what record to start with. Entering 1 will search through all the records and send form letter "COLLECT1" to all those records where line 7 reads "C1 0384".

After the letter is printed, line 7 is changed to read "C2 0484".

If you are sending a letter and only want to record when it was sent out, you could have simply added to line 7 when the computer asked if you wanted to "REPLACE OR ADD" to the line. In this case, you could have added " out on 3/1/84". Line 7 would then read: "C1 0384 out on 3/1/84".

Here's how a record would change after COLLECT1 is sent:

## BEFORE:

1) So \& So
2) Jones
3) XYZ Company
4) 123 Any Street
5) Any City, ST
6) 00000
7) C1 0384
8) \#1108 on $1 / 12 / 84$
9) Mr .

AFTER:

1) John
2) Jones
3) XYZ Company
4) 123 Any Street
5) Any City, ST
6) 00000
7) C2 0484
8) \#1108 on $1 / 12 / 88$
9) Mr .

IMPORTANT NOTE: If you add to a file record, you must first make sure there's room on the record file. If the record size has been sepecified at 117 characters per record, and your adding to a line increases the record size beyond this record length, the system will crash with an input/output error. At this point, you will have to decided whether to continue the process by reducing that record or to continue the process beginning at the next record. In either case, the only way to continue is to start over (prehaps with the record after the one that crashed the system). So please use the ADD option with care.

NOTE: If you input more than one form letter at the beginning of the program, you will go through the matching process for EACH form letter.

We suggest highly that you practice with a dummy file before using the replace prompt section of this program. A mistake could erase a wanted line from your data base file.

By the way, after the third collect letter goes out in the illustration above, the company above replaces 3 lines. Line 1 is changed to read "KILL" so this record is dropped as a paying customer; line 7 is changed to indicate when the last letter went out; and line 8 is changed to indicate that the account should be placed for collection (PLACE).

WRITING A FORMLETTER:
This program is designed to use a letter written and saved using the

```
TI Writer word processing program, or other word processing system
that creates a DISPLAY/VARIABLE 80 file.
Extended Software's TYPWRITER converts its files to TI Writer format
for instance. This can be used.
The system for inputing data from your DATA BASE 1 file is easy. Any
time you want to enter data from your DATA BASE 1 files, preceed the
number of the input line with the character "|" (FCTN A).
Using the example above, anytime a formletter has "|1" in it, the
first name of a file will be printed. "|2" will print last name; "|3"
will print company, etc. Again using the format above, the result
of:
```

| D
| 1 | 2
13
14
$15 \quad 16$
Dear |9 | 2 :
Our records show that we sent
invoice 17.
Please send a check.
After running through the FORMLETTER program will be:
March 17, 1984
John Jones
XYZ Company
123 Any Street
Any City, ST 00000
Dear Mr. Jones:
Our records show that we sent
invoice \#1108 on 1/12/84.
Please send in a check.

Remember in writing formletters that you must leave space for the inputs. In the example above, $\mid 7$ takes up 16 characters on the line. If this is inserted into the middle of a line, you must leave space
for it.

IMPORTANT NOTE: Do NOT ENTER 10 for line 10 on your records. Input zero. Because the program is designed to read one character after each encounter with "|", only single digit inputs are allowed. So line 10 on your data base will be inserted using "|0".

To put the date on a formletter, use the form "|D". Any where that this is encountered, the date as input when asked by the FORMLETTER program will appear. NOTE: This doesn't necessarily have to be the date, but any item.

As with most programs, this will be confusing at first. By experimenting, you will find out how everything works.
** NOTE: Anytime you come up with an input/output error, it means the files the system is looking for are not on the disk drive, do not exist (because of a type-o when inputing letter names), or the file does not match expected characteristics (an INTERNAL format file, for instance).

If this happens, the best bet is to start over, making sure the proper disks and files are in place at the right time.

## *** UTILITY PACKAGE ***

The extensive utilities package on the Data Base 1 disk is self-explanitory. Once you have created a data base, even more powerful data manipulation is possible using the utilities package.

Included in the utilities package (accessed by load menu option \#3) is a full disk catalog system that uses Data Base 1 for manipulation and printout.

## CONCLUSION:

If you do encounter any problem NOT covered by this documentation (which you no doubt will), please contact SPC Software for an answer. We are happy to help anytime.

From time to time, as we discover new capabilities of DATA BASE 1 and FORMLETTER, we will send out information sheets with specifics.

Conversely, if you come up with any novel uses for DATA BASE 1, please let us know about it and we'll pass the info along to other users.

GUARANTEE:
The enclosed program disk is fully guaranteed. If you encounter any

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problems, please contact us immediately. If you accidently destroy
the program disk, return it for a replacement. The service charge is
$5.00 and the old disk must accompany the replacement request.
NOTE: The warranty on the program disk will be voided if the write
protect tabs have been tampered with. There is absolutely NO REASON
for the tabs to be removed. If they have been visibly removed or
tampered with, all guarantees are voided.
All service and programming questions should be directed to:
SPC Software Company
Box 121
Brightwaters, NY 11718
(516) 587-5462
```

