ilume
design

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DATAFILE

*Creative software for the
RS-80 Color Computer*

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DATAFILE
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ILUME DESIGN

DATAFILE is a general purpose, non-formatted database system and, therefore, it can be used for any purpose desired without having to define fields or worry about format.

DATAFILE can store or load previously stored data (disk or tape), perform string searches, add or delete items, sort and print in various formats (provided proper codes are used). It can also edit data using string substitution techniques.

The program checks to see if you have a 16K or 32K system. In addition, it checks to see if you have a Disk System. This is necessary so that it can relocate itself for maximum RAM space availability and to determine the dimension statements for reserving the appropriate number of strings and items it can store.

The program does not work on a 4K system. Such a system does not contain sufficient memory to make a program of this nature worthwhile.

LOADING THE PROGRAM

Being a Basic program, all you have to do is type "CLOAD". The screen should clear and a small "S" will appear at the upper left-hand corner indicating it is searching for the program. Once found, the screen should display a "blinking F" indicating it is loading the program.

If you encounter an "I/O ERROR" while loading the program, you should adjust the volume control on your tape recorder by either lowering or raising it. If you have a tape recorder with a tone control you should aslo try adjusting it.

If you have a Radio Shack CTR-80A recorder, set the volume control between the 4 and 6 markers.

Follow the same corrective procedures if you encounter input errors while loading data that has been previously stored.

Two copies of DATAFILE are on one side of the tape and your FREE file is on the other side.

ENTERING NEW DATA

Selecting "A" from the Main Menu allows you to store new data in the database.

When you select this subroutine, you will be asked if you want to add data from a tape, disk, or the keyboard.

LOADING FROM TAPE --- By pressing "T", you will enter the tape subroutine and will be asked for the name of the file you wish to load. The tape containing the desired data should be placed in the tape recorder ready to be loaded by pressing the "play" button.

See the section on loading the program if you encounter input errors.

LOADING FROM DISK --- If you press "D", the program will search for files currently stored in the disk (disk should have been placed in drive Ø). It will then ask for the file desired. Type in the name of the file you want to load and press (ENTER). After the file is loaded, the program will return to the main menu.

If for some reason you encounter an input error, DO NOT type "RUN" or you will erase whatever data was loaded in. Instead, type "GOTO IØ" and press (ENTER). The Main Menu should appear and you can then search through the file to see up to what point data was loaded. Assuming you did not back up your file (something you should always do), at least you will not have to retype the data already loaded.

Sometimes, due to unexplained reasons, you may encounter input errors when loading data from disk, but on subsequent attempts, the data may be loaded without any troubles. Therefore, before you embark on retyping the data in, try reloading the file and you might get lucky.

Needless to say, you should always create back-up copies of files. The added peace of mind is worth it!

ENTERING DATA FROM KEYBOARD --- If you select "K", the screen will clear and a message will appear on the first line indicating that typing an up-arrow will cause the program to exit to the Main Menu or, if the up-arrow is typed at the end of the data being entered, the program will then advance to the next memory location and will be ready for the next data to be inputed from the keyboard.

See the section on Format Suggestions for ideas and tips on how to input data in order to make better use of the program and its capabilities.

SAVING DATA -- (See Addendum)

Once you are satisfied with the data contained in your file and you are ready to save it on tape or disk, select "E" from the main menu to exit from the program.

Before exiting back to Basic, you will be asked if you want to save the data. If you answer "Y" for "yes", you will then be asked if you want data saved on tape or disk.

Once you choose the appropriate device, the program will save the data and return back to the main menu from which you can then exit back to Basic. It is a good practice to back up your files, so you should always make more than one copy to make sure you can recover the data if something goes wrong with your main file.

SEARCHING FOR DATA

Selecting "F" from the Main Menu will enter the search subroutine. It will first ask for the "keyword(s)" you want to search for and then print the item or items on the screen.

Through the use of keywords, you can selectively list or print whatever data you wish. The more restrictive the keyword, the more selective the search routine will be.

If you do not enter a keyword (i.e., just pressing (ENTER)), the program will list or print all items consecutively, as contained in memory.

By pressing the spacebar, the program will advance to the next item stored in memory that matches the keyword previously entered in the search subroutine, or to the next consecutive item if no keyword was entered.

EDITING DATA

Whenever a data item is displayed on the screen, you then have the opportunity to edit it. You can change any portion of the data shown on the screen, add to it, or delete the entire record. As a reminder, these functions are shown on the bottom of the screen and are described below.

A -- This is the "add" function. When selecting it, you can add additional data which will then appear as a continuation of the data previously stored.

C -- This the "change" function. When selecting it, you will be prompted for that portion of the data you want changed after which you will be asked for the new replacement portion. The "C" function should be selected if you want to add data other than at the end of the data already stored. You can add data within a line by typing in the word or group of words prior to the spot where you want to insert the new data.

You can also add a new line in the middle of the text already stored through the use of a special code (obtained by pressing the "down-arrow key" while holding down the "shift" key. You do this by typing the last word of the line after which you want to insert the new line when asked what portion of the record you want deleted. Then when asked for the data to be added, you type the same last word, plus the "shift-down-arrow" combination, plus the new line.

D -- This is the "delete" function. If you press "D", the item shown on the screen will be deleted from memory. The program will then pause for a few seconds while it restructures items stored in memory.

USING A PRINTER

There are several print subroutines included in the program. You

can print all of the data or only that data containing certain selected keywords. In addition, you can select any single data item for printing.

Before outputting data to a printer, the program checks to make sure the printer is on. If it is not on, a message indicating so will be displayed on the screen and the program will return to the main menu or the data display (if you were trying to print a single item).

If you select "P" from the main menu, you will be asked for a keyword. If you do not enter any keyword (done by just pressing (ENTER))all data contained in the file will be sent to the printer. If you select a keyword, then only those items containing such a keyword will be sent to the printer.

If you want to print a specific item, you should first search for it. Once the specific item is shown on the screen you can then select the "P" function and it will be sent to the printer. The bottom of the screen shows the functions available as a reminder.

When selecting the print function from the main menu, you will be given a choice as to whether you want "regular" or "special" format for printing. The regular format will print items just as shown on the screen. A carriage return will be outputted to the printer whenever you press (ENTER) while entering the original data. The "special" function is available for the user to program as wished.

If you make no modifications to the current program and choose the special function, items will be outputted to the printer as a long string by ignoring the carriage returns included in the original data. You will find an "*" in place of such carriage returns.

SORTING DATA

A special sorting routine has been incorporated in the program which is much faster than the popular "bubble" method. The one limitation of this sort method is that it can not handle two items exactly alike. If the sort routine encounters duplicate items, the sort will stop and you will be requested to delete one of the duplicate items.

Whenever you select the "S" function from the main menu, you will be asked for a "sort code". If no sort code is entered, the data will be sorted based on the entire string contained within each of the memory locations.

If you enter a sort code, the sorting will be performed based on the data contained in each string past the sort code. For example, if the file is a name and address file and you have entered a comma between the city and the state, using a comma for the sort code will cause the program to sort the data by state in this specific instance.

If you use a sort code (and no data in memory contains such a code), the sorting routine will stop and the data missing the

sort code will appear on the screen. You should then insert the necessary data (by using the editing function "C") so you can continue the sort.

OTHER FUNCTIONS

Besides the printing and editing functions noted above, there are tow other functions available as noted on the bottom of the screen when data is displayed.

If you select the "S" function, the program will stop the display routine and return to the main menu.

The "?" function, when selected, will describe the various functions available.

HIGH SPEED FUNCTION

The program will run at high speed whenever searching for data or sorting it. It also operates at high speed when entering new data from the keyboard.

It is quite possible that your computer cannot handle higher speeds. If that is the case, the program will not run or the computer will "hang", in which case you will have to push the reset button.

If your computer cannot handle the high speed or you do not want to use high speed, then delete the "POKE 65495,Ø" function by changing line 9 to read "PK = 65494".

If you want to take advantage of the high speed but your computer cannot handle it, there is a rather simple solution. Just remove capacitors C73 and C75. This is done by either clipping one of the leads off or by removing one of the leads with a soldering tool. If you have a Disk System, you will also have to remove capacitor C85.

FORMAT SUGGESTIONS

Included with these instructions are some tips and suggestions on formatting data so you can better utilize this program. Once you become familiar with the various functions available and how they work, you will be able to further enhance the use of the program with your own imaginative data formats.

WHEN ALL ELSE FAILS

If you encounter some problems which are not covered by these

instructions and you do not know what to do, please call or write describing the specific circumstances involved.

Send your note to:

ILUME DESIGN
4653 Jeanne Mance St.
Montreal, Quebec
Canada H2V 4J5
Source: ST0602
Compuserve: 70315,1032

Listed below are some suggested uses of DATAFILE and illustrations as to how data can be manipulated.

If you are going to do varied sorting and printing within a data file, it is important that such data be entered uniformly, otherwise, the desired results may not be obtained.

NAMES AND ADDRESSES

This is common application for database programs such as DATAFILE.

The information could be entered as follows:

John A. Smith (ENTER)
125 Main Street (ENTER)
Chicago, Illinois 12345 (ENTER)
(212) 123-4567 (ENTER)

The above data could be "searched out" by including any of the above data as a keyword. Example keywords would be "John", "John A. Smith", "Chicago", etc.

Sorting could be accomplished in several ways:

Last name -- sort code: ","
State -- sort code: ","
Zip Code -- sort code: " " (two blank spaces)
Area code -- sort code: "("

Of course, in order to sort as above, you will always need a middle initial followed by a period, a comma after the city name and telephone numbers with area code in parenthesis (this is the required uniformity referred to above). What if there is no middle initial? Well, just add a period anyway, like John. Smith, otherwise, you will not be able to sort properly by last name. Of course, you can also enter the data as "Smith, John A." and it will sort by last name without any keywords needed (just press (ENTER) when a keyword is requested) in which case data may look like this:

Smith, John A. (ENTER)
123 Main Street (ENTER)
Chicago, Il. 12345 (ENTER)
(212) 123-4567 (ENTER)

You can still sort by state (sort code: ", "), and by Zipcode (sort code: ". "). Notice the two blank spaces after the comma and the period.

Choosing the "regular" printing mode will cause the item to be printed just as shown on the screen. If you choose the "special" printing mode, it would look like this:

"Smith, John a. *123 Main Street *Chicago, Il. 12345 *(212) 123-4567"

The asteriks will appear in place of carriage returns and will all be printed on one line. The "special" printing subroutine could be changed to obtain varied printing formats.

TO DO LISTS (JOB JAR)

This is another simple application. Data could be entered as follows:

Yard -- 3Ø min. (ENTER)
Plant flowers in front of the (ENTER)
house on sunny day. (ENTER)
Buy seeds. (ENTER)

If you have 3Ø minutes available, use "3Ø" as the keyword in a search and this item will pop up on the screen. Going shopping? Obtain a printout of all items with the keyword "buy". Want to know jobs to do on a "sunny" day, just search for "sunny".

REPAIRS AND MAINTENANCE RECORD

Do you have a hard time keeping track of past repairs and maintenance jobs. Here is one way data could be entered:

Kitchen -- dishwasher

Replaced heating coil (15MAY82) (ENTER)
The Handy Company (John Fixit) (ENTER)
123-4567 (ENTER)
Labor $5Ø.ØØ (ENTER)
Parts $12.ØØ (ENTER)

You could have separate repair and maintenance files for the home, car, camper, etc. Although this is not necessary. If you want the file commingled, just use the words "home", "car", and "camper" in the data just as was done with "kitchen".

SOFTWARE RECORD

You will undoubtedly have a good use for an application of this nature. You could enter the data as follows:

DATAFILE - Database system
Basic
$19.95
ILUME DESIGN

Universal database system that
can be used for multitude of
items. No preformatting is needed.
Data can be sorted and printed
using various formats.

OTHER APPLICATIONS

There are endless applications for a program of this nature with the only limitation being your imagination.

Here are some other suggestions.

Major item purchases
Medical records and history
Collections (records, beer cans, stamps, etc.)
Log books (CB, Ham Radio)
Recipes
Calendar of important dates
Scholastic records
Tax return records

ilume design

4653 Jeanne Mance St.
Montreal, Quebec
Canada H2V 4J5

DATAFILE : Revision 2.0

Three changes have been made to the enclosed DATAFILE version:

1. The subroutine that clears the screen and shows menus with green letters on a black backgroun has been changed. Users who had black and white television sets will now see an entire black background rather than different shades of black.

2. The sorting subroutine has been changed to a machine language subroutine which is much faster than the previous one. You can still sort the entire string or do "code" sorting as explained in the instructions. You can now sort even though sort "codes" are not included in some of the data (the program just warns you about it and places those items in front of the file). Also, you can sort even though there are two items exactly alike while before you could not.

3. A "merge" subroutine has been added so that files larger than RAM space available can be generated. It only works with Disk systems and does not work with cassette systems. If you select the merge subroutine, you are asked for a file name (the program shows you those files already in the disk) and once you select a file, the program creates a new file by merging the file selected with the file in RAM. If the file in RAM and the file selected from the disk are both in alphabetical order, then the new merged file will also be alphabetically.

Note: If you should accidently hit the BREAK key or if the program 'crashes' for any reason, all files in memory can be saved by entering GOTO 10. Do not enter RUN.