

TRS-80 GROUP GETS SECOND MEETING EACH MONTH !

Starting with this month, the LITRUG will meet twice each month: the first and third Fridays. The first Friday of the month will be our "lons" meetings where we will schedule our lectures and club functions. These meetings will start at 7:00 PM and go 'till whenever.

The second meetings (on the third Friday of the month) will take place just before the regular LICA meetings (at 7:00 PM). Due to the fact that these meetings will only be one hour lons, they will be strictly for club "business". Tonights line up of club business appears later in this issue.

For those of you who weren't there, our first "lons" meetings took place on May 1st. As you may have seen in the STACK, not everyone was notified of this meeting because of its last minute nature. We wish to express our thanks to Res Peeples for an informative presentation on use of the Editor Assembler, with several example programs. Res had to go back to Georgia, but will be back around late August.

Our current mailing list seems to be missing many phone numbers. If your number was on our list, we tried to notify you of the meetings. If your name is not on our list or your phone number is missing, we would appreciate your giving us the needed information.

Our next "lons" meetings will be held on Friday, June 6, 1980 at 7:00 PM at our regular meetings room at New York Institute of Technology. The meetings will include a lecture on Disk File Techniques. The lecture, presented by Fred Kempler, will start out with the basics of setting up and using sequential and random access disk files and brings you all the way through to advanced database techniques like those implemented on larger computer systems. If you would like to learn how to use Disk Basic to its fullest, don't miss this lecture!!

Now on to the business for tonight's meetings.

1. The first order of business is this newsletter. It was hastily prepared the night before this meeting in order to inform all our members of what's going on. We need some people in our group to produce this newsletter as one person cannot do this alone.

2. The Disk Lending Library -- is alive and well but needs help! Right now this library is being prepared by Ed Zuilkowski and Fred Kempler and they need assistance in compiling documentation for the extensive list of titles we have compiled. For many of the programs, the documentation can be just a few paragraphs typed out onto the disk. Easy enough, but we need people who can do that. There are just too many programs. Any one who would like to help out, please see Fred or Ed.

Incidentally, any one who would like to be a member of the Disk Lending Library, may do so for only a \$5.00 membership fee (the money is used to purchase disks). Membership entitles you to borrow one disk of programs, with documentation, for one month. Note that these disks are for your viewing purposes only and are not intended for copying!

3. For those of you who don't have Disk Systems, we are starting a Tape Lending Library. This facility will be operated like the Disk Library. Those who wish to sign up, see the Librarian, Ed Fischer.

4. We need volunteers for future lectures! If you can talk on ANY computer subject for more than ten minutes, without boring everyone to death, we need you!! See Bob Zito (our President). If you give a lecture, you might become an instant TV Star!! We are videotaping our lectures for those who cannot make the meetings and to swap tapes with other user groups. The concept is that we may be able to have guest lectures from other groups via tape. Can anyone supply a large screen TV for some future meetings?

WHAT CAN LITRUG DO FOR YOU?

The question really is: What can YOU do for LITRUG (I know it's corny but it's true). These meetings can only be as good as YOU make them. We have a very diverse constituency and it is very hard to cater to all tastes. The answer is: if you see something you think needs to be done, and you can do it, bring it up as club business!

QUESTIONAIRES:

Quite frankly, we know very little about our members. We would like to know how many Disk users, Tape users, Modem users, Model II users, Level I users, etc. we have, so that we can better structure our meetings to meet the needs of its members.

To help us gather this information, we have produced the attached questionnaire. We hope that each member will fill it out and SIGN THEIR NAME. This information will be compiled into special lists to enable members to know of others who have similar interests and equipment. Please return the filled out forms at the end of this meeting. If you completed a questionnaire already (at the last meeting) you need not do it again.

By the way, this newsletter was prepared using SCRIPSIT and a TRS-80 modified for lower case (non Radio Shack).

FILE ACCESS BASICS AND TECHNIQUES

A. INTRODUCTION

1. FILES AND FILE STRUCTURE
 - A. TYPES OF FILES

2. OVERVIEW OF RADIO SHACK DISK BASIC

B. SEQUENTIAL FILE BASICS

1. ADVANTAGES AND DISADVANTAGES OF USE
2. SEQUENTIAL FILE STATEMENTS
 - A. OPEN
 - B. CLOSE
 - C. INPUT #
 - D. PRINT #
 - E. LINE INPUT #
3. SEQUENTIAL FILE FUNCTIONS
 - A. EOF ()
 - B. LOF ()
4. SPECIAL FUNCTIONS
 - A. NEWDOS OPEN"E" MODE
5. EXAMPLES OF USING A SEQUENTIAL FILE
 - A. FORMULATION OF DATA SET
 - B. CREATION OF THE FILE
 - C. RETREIVAL AND UPDATE OF DATA

C. RANDOM ACCESS FILE BASICS

1. ADVANTAGES AND DISADVANTAGES OF USE
2. RANDOM FILE STRUCTURE
 - A. PHYSICAL RECORD STRUCTURE
 - B. CONCEPT OF RECORDS AND FIELDS
3. RANDOM FILE STATEMENTS
 - A. OPEN
 - B. CLOSE
 - C. FIELDING THE BUFFER
 1. DETERMINING THE FIELDS
 2. THE FIELD STATEMENT
 - D. LOADING THE BUFFER
 1. LSET AND RSET
 - E. READING AND WRITING DATA
 1. PUT STATEMENT
 2. GET STATEMENT

4. RANDOM FILE FUNCTIONS

- A. CONVERTING NUMERIC INFORMATION TO STRINGS
 - 1. MKIS, MKSS & MKDS FUNCTIONS
- B. RECOVERING NUMERIC INFO FROM STRINGS
 - 1. CVI, CVS & CVD FUNCTIONS
- C. LOF & LOC FUNCTIONS

5. BETTER USE OF RANDOM FILE RECORDS

- A. USE OF SUB RECORDS
 - 1. CONCEPT OF LOGICAL VS. PHYSICAL RECORDS
 - 1. GENERALIZED SUB RECORD RETREIVAL

D. ADVANCED RANDOM FILE TECHNIQUES

A. CONCEPT OF KEY FIELD

- 1. USING KEY FIELD FOR PUT AND GET

B. HASHING

- 1. CONCEPT OF HASH ADDRESSING
- 2. DEVELOPMENT OF GENERALIZED ROUTINE FOR HASHING
- 3. EXAMPLE OF HASH ADDRESSING IN USE

C. INDEXED FILES

- 1. CONCEPT OF POINTERS
- 2. USE OF A HEADER FILE

D. LINKED LISTS

- 1. CONCEPT OF LIST
- 2. TYPES OF LINKED LISTS
- 3. USE OF LINKED LISTS WITH A HEADER FILE
- 4. MECHANICS OF LINKED LIST UPDATE AND RETREIVAL

E. DISCUSSION OF A "FULL BLOWN" SYSTEM

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100 '----- GET A NAME, DISPLAY ON SCREEN -----
105 OPEN "R",1,"NAMEFILE"
110 CLS : INPUT "ENTER NAME TO RETRIEVE"; N1$
115 IF N1$="" THEN RETURN
120 S=1 : GOSUB 500/1000
125 IF XX=20 THEN 110
130 PRINT "NAME:           ";N2$
135 PRINT "ADDRESS:        ";A2$
140 PRINT "CITY, STATE     ";C2$
145 PRINT "ZIP CODE        ";Z2$
150 PRINT "PHONE #         ";P2$
155 PRINT : PRINT "IS THIS THE CORRECT NAME (Y/N)"; : INPUT Q$
160 IF LEFT$(Q$,1)="N" THEN GOSUB 1045 : GOTO 125
165 INPUT "PRESS <ENTER> TO CONTINUE";Q$ : GOTO 110
:
:
:
500 '----- CALCULATE PR AND SR, FIELD BUFFER -----
505 PR= INT((LR-1)/4)+1 : SR= LR-4 * INT((LR-1)/4)-1
510 FIELD #1, SR*64 AS D$, 15 AS N2$, 15 AS A2$, 15 AS C2$,
    5 AS Z2$, 14 AS P2$ : RETURN
:
:
:
1000 '----- HASH ADDRESSING -----
1005 XX=0 : K$=N1$ : K=0
1010 FOR I=1 TO LEN(K$) : K=K + ASC(MID$(K$,I,1)) * I : NEXT I
1015 N=500 : Q=INT(K/N) : LR=INT(K-N*Q) : IF Q=0 THEN Q=1
1020 IF LR=0 THEN LR=1
1025 GOSUB 500 : GET 1,PR
1030 ON S GOTO 1035, 1040
1035 IF N2$ > "0" AND N2$ < "[" THEN 1060
1040 IF N2$ < "A" OR N2$ > "Z" THEN ON S GOTO 2000, 1045
1045 XX=XX+1 : IF XX>=20 THEN ON S GOTO 1065, 1070
1050 LR=LR+Q : IF LR>N THEN Q=INT(LR/N) : LR=INT(LR-N*Q)
1055 GOTO 1025
1060 IF N2$=K$ THEN RETURN ELSE 1045
1065 XX=20 : PRINT "ENTRY NOT FOUND -- PRESS <ENTER>" : GOTO 1075
1070 PRINT "NO ROOM TO INSERT THIS NAME -- PRESS <ENTER>"
1075 INPUT Q$ : RETURN
:
:
:
2000 '----- FILE NEW NAME -----
2005 LSET N2$=N1$
2010 LSET A2$=A1$
2015 LSET C2$=C1$
2020 LSET Z2$=Z1$
2025 LSET P2$=P1$
2030 PUT 1,PR : RETURN

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