

Bayou 99 Users Group, P.O. Box 921, Lake Charles, La. 70602

BAYOU BYTE



Price One Dollar

Distribution: 250 copies

NEW MEETING NIGHT!! TUESDAY TUESDAY TUESDAY

SEPTEMBER 9, 1986

The Novice class in BASIC programming will start at 6 P.M. and continue until 7 P.M. when the regular meeting of the B99UG will start. The regular meeting will feature a program on TI 99/4A ASSEMBLY LANGUAGE. Richard Mitchell will be presenting the program which will introduce the fundamentals of A/L programming. Knowing how your computer keeps track of the program steps, various inputs, and arithmetic operations will enhance your understanding of your computer's capabilities.

Come out and share in learning and in what YOU know. Remember it's your loss if you don't come but it's everyone's gain if you do come!

EDITORIALLY SPEAKING:

I've been reading many of the other user group newsletters and find many have problems in common with us. However, the July '86 issue of the SAN FERNANDO VALLEY 99er Times message from it's Editor, Ken Johnson, expressed my feelings exactly. I hope he doesn't mind my quoting extensively from his column:

"Back in 1981, when I was shopping around for a computer, the one final thing that sold me on the 99 was the small number of used ones for sale. I constantly checked the Recycler, swap meets, and other used equipment lists. I could find scads of IBMs, Apples, Commodores, Ataris, etc., but very, very few 99's for sale (and that's still true today!). So I decided to go for it because there had to be something special about the 99 because people who bought them, kept them.

Along this same line, I was sitting in our meeting a couple of months back, listening to Steve Mehr (of Mehrware, Tri-Valley 99ers, and now SFV99ers; welcome Steve!), talking about some of the fantastic features of DISKMASTER I (DataBioTics). It created some questions in my mind as to where would we 99ers be today if TI had not dropped the 99?

Would we have things like: DISKMASTER, MASS TRANSFER, GRAM KRACKER, BA WRITER, FUNLWRITER, 512K RAM, TRIPLETECH, TI ARTIST, SUPER SKETCH, SCREEN DUMP, etc. ad infinitum? And even if we had half of these, what would be the price? Would we have the large number of active 99ers, Users Groups, and newsletters we have now? Well, I don't think so and I came to the conclusion that even though we complain about being orphans and throw darts at TI for abandoning us, I think it is one of the best things that could have happened to us. It caused us to dig more deeply into understanding our computer. It caused us to band together to share knowledge and programs rather than to sit back and continue to lay out large sums of money for the meager periodic bits of information, hardware, and software being doled out by TI (there's another dart!). But, of course, I also came to the conclusion many years ago that 99ers are a unique (peculiar?) breed. So, I think we ought to be thanking TI (but not too strongly), but most of all thanking those persistent, creative 99ers responsible for a large amount of what we have today.

This brings up another subject. When was the last time you sent money to the author of any Freeware or Fairware you may be using? Or for that matter, bought a legal copy of a copyrighted program you liked? I know it is easy enough to say "Well, I paid \$3.00 to the Club for the disk. I thought that's all I had to do." or "Gee, I didn't know it was copyrighted." or "It was on a diskette some friend gave to me. I didn't think that was illegal." If we don't play the game fairly, it will disappear. Recently, DataBioTics announced that they were fed up with the 99ers pirating their copyrighted programs and hence forth they were doing no more software for the TI99/4A. They were finally convinced by telephone calls and letters from honest 99ers, that it was unfair to condemn all 99ers for the acts of a few slacks, and so they will continue to write for the 99. That's what can happen, and talk to any Freeware/Fairware program writer about how frustrating it is to spend a lot of time on developing a program, release it, watch it spread across the world, and then only receive money for about 5% of the program users.

=====

T. I. TIPS

Jack Topham of the "Chicago Times" newsletter and Bob Mack of the "TI Talk" (Jackson, MS) both "mine the gold" in other usergroups news letters. They glean the good ideas, tips, and shortcuts from other usergroup newsletters and print them in their own newsletter. I've done the same thing, including using some of their's too! I feel that this is the essence of usergroups; helping each other to master the best computer out there, even today.

TURBO TI:

1) From the MUSKEGON area UG comes a tip for speeding up your XBASIC programs. They suggest entering a CALL LOAD (

-31878, N) where N is the number of sprites used from 0 to 28. Don't forget CALL INIT before the CALL LOAD. Try it.

2) From JACKSONVILLE UG in ARIZONA comes this tip from Ralph Devine. Many of us use BASIC and XBASIC in a truly unstructured way. We build the program as we go, using RES to open up lines, etc. Our program LISTS in line No. order and "looks" structured. So, finally when it is done and it RUNS OK, we are pleased. It seems that inside our 99/4A marvel our jumbled line order is preserved and time is lost looking for the next line to execute. Solution! Save the file using the XB MERGE option. Sure, it is slow, but it is saving the program in sequential line order in MEMORY IMAGE format. Type NEW then reload using MERGE then SAVE as a PROGRAM. This can make an appreciable difference in execution time. Give it a try!

3) A memory saver (less memory used, faster execution!) from TI TALK: If you add the following statement to your BASIC or EXTENDED BASIC program, you will save 2 bytes every time you use the numeral "1": line #1@=1 then in place of 1 type the symbol "@". A little confusing but if memory is a problem, every little bit helps.

4) At the end of your EXTENDED BASIC program, you can "CALL INIT::CALL LOAD(-31962,255) and your console will search for a program called "LOAD" on drive #1. If such a program is not there, you will get a cursor on the XBASIC screen.

TI-WRITER TIP:

The NORTHWEST OHIO UG offered this TI TIP. To avoid a BUFFER FULL notice in the TI-WRITER, you should save the files and then use the SD command to see the file size. Since the BUFFER is full at 92 sectors, you can see right where you are. Thanx NW O UG!

MULTIPLAN TIP:

From the UPPER PINELLAS 99'er GROUP comes a MULTIPLAN TIP: Once you start scrolling, you can release the FCTN or CTRL key and just keep the ARROW key depressed. Try it!

PRINTER TIP:

The NE IOWA UG reported on using "PRINT USING" with the printer, an OBSCURE feature of the 99/4A. Brush up on PRINT USING and IMAGE in the XBASIC manual (Chapter 4, page 150 and 97) and go for it in printing to the printer. Just OPEN # and PRINT # and the rest is the same.

ERROR CHECK:

From TI TALK comes an data error print solution: When you get an error message like "DATA ERROR IN LINE XX", and the line referred to turns out to be a READ statement; you can isolate the error by temporarily changing the READ to PRINT. RUN the program and you will see the last data read correctly just before the error message!

=====

PRESIDENT'S REMARKS

The most important news is the move to Tuesday night. Beginning in September, our Group will meet the 2nd Tuesday each month at the same location in the A.O. Nelson Elementary School Library. This move has been made to accommodate the large number of members with conflicts on Thursdays. This change in meeting nights should allow more of our members to attend the meetings.

As I read through the newsletters our User Group receives from the other Groups throughout the country, I am reminded of the progress users of the TI 99/4A have seen since Texas Instrument abdicated from the home computer field. Prices were high with a number of command modules retailing at over \$50 with TI-Writer, Multiplan and Extended BASIC at just under \$100. At the same time the owners of the 99/4A's were full of enthusiasm and scraping together enough cash to be able to buy the Peripheral Expansion Box or maybe an external disk drive. User Groups were being organized and sending in their applications to Texas Instrument for official recognition.

A few months after Texas Instrument dropped its bombshell (or layed an egg), spirits were dampened and doubts were raised in the mind of the users as to the wisdom in expanding a dead computer. Prices for hardware and software packages tumbled and people questioned whether they should keep their computer or immediately switch to one of the other currently popular models either currently marketed or announced as soon to be available.

Three years have now elapsed and the Aquariuos, VIC-20's, 800 XL's and later models like the Adam are all history, but the 99/4A still survives with new software and peripherals still being introduced. The fact is that the 99/4A is better than ever. Users with expanded systems including at least one disk drive are enjoying an ever increasing versatility while the owners with only the console and a tape recorder will either expand or drop out.

We can't afford to stop and mourn the members we have lost; our future is with those providing users with new-found capabilities and with those users new and old who are eager to explore these new fairware and commercial software offerings and the developers of new and exciting hardware.

The real user knows the 99/4A is not dead or even resting. It is as dynamic as any other model of home computer on the market and if an affordable Peripheral Expansion unit reaches the market place, we could be out in front again.

BASICS

The BASIC programming class met and continued to unravel the basics of programming. At the last meeting the PRINT, INPUT, LIST, NEW, READ, DATA, GOTO, and REM commands and statements were reviewed. The extensive homework assignment was no problem for the class, so the next group of commands and statements were introduced. These were IF...THEN, IF...THEN...ELSE, AND, OR, END, FOR...TO...STEP, NEXT, and RESTORE.

A brief overview of each was given and another large homework assignment was handed out to be worked before the next meeting. The information acquired to date has allowed members of the class to write, review, and EDIT simple programs to display information on the CRT screen in their monitor or TV. At the conclusion of the next lesson, the programming capabilities will have been expanded to include programs which can make decisions.

ASSEMBLY LANGUAGE TUTORIAL #1

By

R. N. HICKERSON

The program for the August meeting featured an introduction to Assembly Language Programming by Richard Mitchell. The success of this program is a real tribute to Richard when we mention that half those in attendance had just come from the third class in BASIC Programming.

To illustrate, a very simple program was written to run from E/A which will print a line of text on the screen. The program served to illustrate the use of label, opcode and operand which appear in the preparation of the source code. The code written became the source of the assembled program. The source code was written with explanation for each notation made. Since each line of code contains an operand and opcode and may contain a label. Headings are entered here for clarity and are not part of the source code.

	<u>LABEL</u>	<u>OPCODE</u>	<u>OPERAND</u>	
01		REF	VMW	Since the Video Multiple Byte Write resident in the computer will be used, it must be included in the REF list.
02		DEF	START	The DEF directive places the name of the program into the REF/DEF table.
03	MYWS	BSS	>20	The Block Starting with Symbol reserves 32 bytes of memory for program workspace. The label MYWS allows the program to find the contents without an actual address being provided.
04	START	LWPI	MYWS	The label START was defined in the REF/DEF table to be the symbolic address of the beginning of the program. The first step is Load Workspace Pointer Immediate (LWPI) to establish a pointer to the block of memory (MYWS) defined in Line 3.
05		LI	R0,0	Load Immediate Place the value zero into Register 0, R0 is the register containing VDP RAM. This value determines the location of character displays on the screen.

	<u>LABEL</u>	<u>OPCODE</u>	<u>OPERAND</u>	
06		LI	R1,S1	Load Immediate is used this time to load into Register 1. The memory address (S1) where our text will be found.
07		LI	R2,11	Load Immediate is used again. This time to load 11 (>8) into Register 2. This value is the number of bytes in the text to be displayed.
08		BLWP	@VMBW	BLWP stands for Branch and Load Workspace Pointer. This is used to have the workspace pointer point to the resident utility Video Multiple Byte Write which will cause our text to appear on the screen with the information from R0,R1, and R2.
09	QUITKY	LIM1	0	LIM1 is the op-code mnemonic for Load Interrupt Immediate.
10		LIM1	2	The instruction LIM1 0 causes a 0 to be placed into the interrupt mask which disables all interrupts. LIM1 2 sets the interrupt mask to level 2 enabling interrupts at levels zero, one and two. The FCTN=(Quit) is now capable of interrupting our program.
11		JMP	QUITKY	JMP designates an unconditional jump to the instruction QUITKY.
12	S1	TEXT	'HELLO, GANG'	This is the 11 byte TEXT message located at the address labeled S1.
13		END		The END command is necessary to exit the assembler.

Going to the Editor/Assembler Title Screen, select EDIT which brings up the Editor Title Screen. Select EDIT and carefully type the sample program and check it for errors. After correcting any typing errors, return to the Editor Title Screen and select SAVE. Using a system with one disk drive, place the diskette to be used in Drive #1, enter "Y" to the prompt "VARIABLE 80 FORMAT (Y/N?" Then responding to the prompt for a filename, enter DSK1.START/S to save the source code. When the SAVE is complete, return to the Editor/Assembler title screen and select ASSEMBLE. When the ASSEMBLER disk is in Drive #1, respond to the prompt with a Y. When START/S has been loaded, you will be asked for the filename for the object code, enter DSK1.START/O. When asked for a device name for the assembly listing, enter DSK1.START/L.

The next prompt requests option you wish. Enter RLS for allowing reference to the registers (R), to produce a listing (L), and to include a symbol table map (S).

ASSEMBLER EXECUTING will now appear on the screen. If everyone, including the Newsletter Editor, has done his job properly, the assembly process should end with a 0000 ERRORS display.

At this time, return to the Editor/Assembler Menu Screen and select LOAD AND RUN (option 3). At the first prompt for filename, enter DSK1.START/0; at the second prompt, press <ENTER> and a prompt for PROGRAM NAME is displayed. Type in START and the 'HELLO, GANG' will appear starting in the upper left hand corner of the screen. To exit the program, press FCTN=.

Try this for your first attempt at writing an Assembly Language program and attend our next meeting for the next step into this new world of programming.

LAGNIAPPE

- * From Terrie's Corner in TopIcs (LA 99'ers Computer Group) we learn that Lou Phillips has advised an Eprom is available for the FOUNDATION RAM disk allowing it to be used with Myarc's XBII Level IV. The cost is \$10 with the purchase of Myarc's XBII.
- * Terrie also writes, in the same issue, that if you have XBII, now is the time to send a blank disk to Myarc for the updated version of XBII Level IV. Version 2.1 is now being readied for shipment.
- * A bulletin has been received from DRESSELHAUS Computer Products on a new product for Epson printer owners. If you use the FX, JX, RX or MX model, you may upgrade with a kit named DOTS-PERFECT. The DOTS-PERFECT upgrade provides these users with the option of near-letter quality (NLQ) printouts plus selection of font combinations and a buffer-clear command for \$63.96. Coupons to validate the 20% discount from the \$79.95 list price are available from Roger.
- * Tim Swedlow has released the FAIRWARE program SIDEPRINT. The program will print a Multiplan spreadsheet sideways on your printer avoiding the taped-together sheets which are normally necessary.
- * The BAYOU TIBBS has received its 10,000 call and the calls are continuing to come in. If you haven't logged on yet, call (318) 474-6144. If you belong to another II Users Group, leave a message to the SysOp and he will set you up with a number of upload credits so you will be able to download from the large group of program files on the BBS.
- * A number of new RLE (Run-Length-Encoded) images have been added to the Library. Don't forget to ask the Library for programs by subject if you don't know the name. If you need a program for interest calculations, ask for it and let the Library pick it out for you.
- * Roger Hickerson has a Video Chess cartridge for sale as well as several other modules. The Video Chess is getting more and more difficult to locate. *Or you can rent them! \$1.00 per month!*

BAYOU 99 USERS GROUP
OFFICERS

PRESIDENT Roger Hickerson
 VICE PRESIDENT Noel Moss
 SECRETARY John Singleton
 TREASURER Robert Nordan

COMMITTEE CHAIRMEN

NEWSLETTER EDITOR John Singleton
 PROGRAM Richard Mitchell
 LIBRARY Sonny Hoffpaair
 RECRUITING & EQUIPT. Pete Still
 TRAINING Tim Hill
 EDUCATION John Singleton
 TIBBS - SYSOP Roger Hickerson

ARTICLES AND OTHER MATERIAL APPEARING
 IN THE BAYOU BYTE MAY BE COPIED BY
 OTHER USER GROUPS OFFERING RECIPROCAL
 PRIVILEGES IF BOTH BAYOU BYTE AND
 BYLINE CREDIT ARE GIVEN.

**ADVERTISEMENT
 RATE SCHEDULE**

FULL PAGE.....\$14.00
 HALF PAGE..... 8.00
 QUARTER PAGE..... 6.00
 EIGHTH PAGE..... 4.00
 MINIMUM 4 LINES..... 3.00

Members are entitled to three lines free
 each month for notices or ads for per-
 sonally owned hardware or software.



"NOTICE"
BAYOU 99 USERS GROUP
 P.O. BOX 921
 LAKE CHARLES, LA. 70602

MEETING 2nd TUESDAY EACH MONTH AT 7:00 P.M.
 A. A. NELSON ELEMENTARY, 1001 COUNTRY CLUB
 ROAD, WEST OF LAKE STREET ABOUT 2 BLOCKS ON
 SOUTH SIDE OF COUNTRY CLUB ROAD.

Learn More About Your Texas Instrument Computer
 Join A Users Group Now

1988 MEETING DATES

JAN 9	FEB 13	MAR 13	APRIL 10
MAY 8	JUNE 12	JULY 10	AUG 14
SEPT 9	OCT 7	NOV 11	DEC 9

The opinions and views expressed in
 articles published are those of the
 authors and do not necessarily re-
 flect the views of the officers or
 members of the Bayou 99 Users Group
 or the Editor of the BAYOU BYTE.

Mention of a company or product in
 the BAYOU BYTE does not constitute
 an endorsement by either the BAYOU
 BYTE or the Bayou 99 Users Group.

```

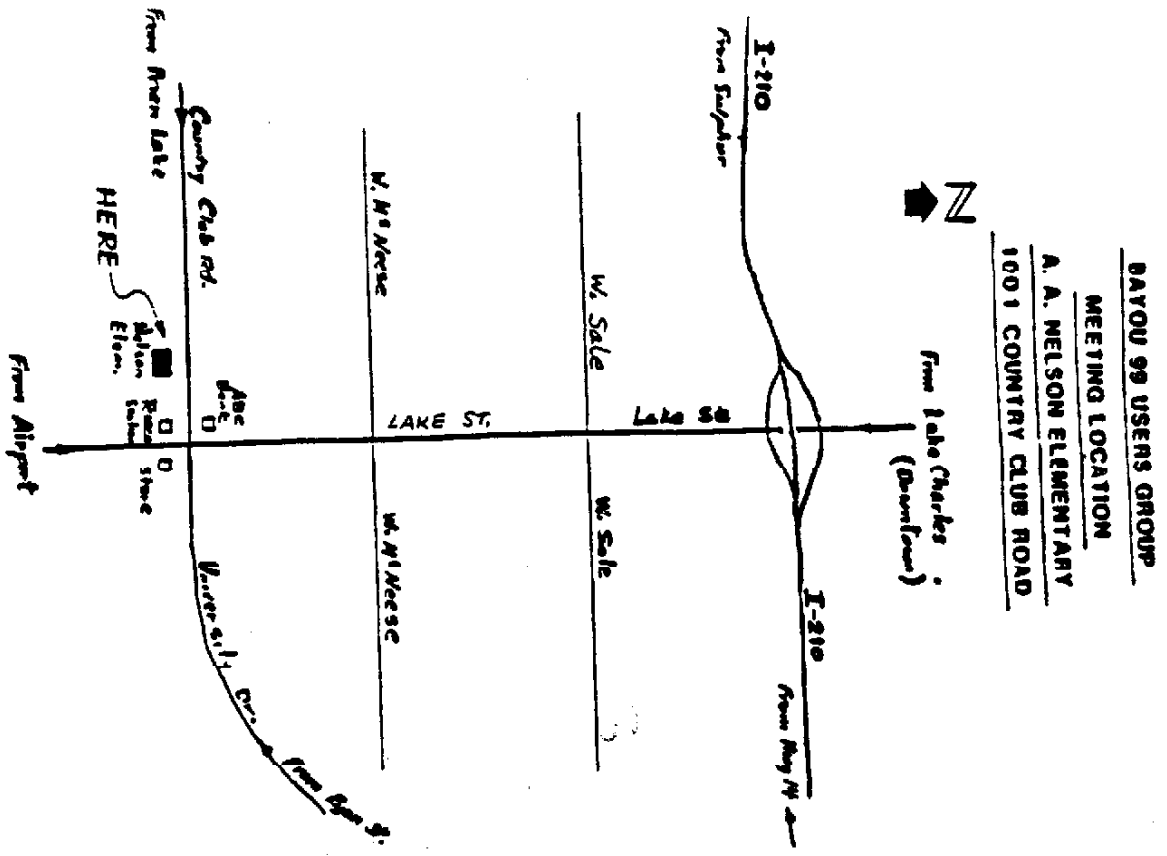
-----
I I I I I I I I I
I O I I I I I I O I
I I - - I O I - - - - - I O I - - I I
I I O O I I O O O O O O I I O O I I
III I O I I O I III
I O I I O O O O O O I I O I
I I O I I O I I
I O O I I O I I O I I O O I
I I O I I I I O I I
I I I I I I I I I
I O I I I I I I I O I
I O I I I I I I I O I
I I I I I I I I I
-----
    
```

1200 B/N/1 300 7/E/1
The IMPOSSIBLE DREAM BBS
 >>HOUMA,LA.<< >>(504) 851-5190<<

WELCOME TO DREAMLAND!
 VISIT THE ADVENTURE GAMES! >>RASPION<< >>ADVENTURE<<

1200 B/N/1 300 7/E/1
The IMPOSSIBLE DREAM BBS
 >>HOUMA,LA.<< >>(504) 851-5190<<

SYSOPS: Joe Zorn Stephanie Zorn Billy Zorn
 Jim Barnett Rick Luquette
 TI 99/4A XMODEM File Transfers
 Adapted from Montie Schmidt's "TECHIE" BBS



BAYOU 99 USERS GROUP
MEETING LOCATION
A. A. NELSON ELEMENTARY
1001 COUNTRY CLUB ROAD

BAYOU 99 USERS' GROUP
POST OFFICE BOX 921
LAKE CHARLES, LA 70602

Non-Profit Org
 U. S. Postage PAID
 Lake Charles, LA 70601
 Permit No. 89

CENTRAL ALABAMA 99/4 U.G.
 551 LARKWOOD DR.
 MONTGOMERY AL 36109