

-----	-----
- NO.	- DATA -
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	

	48		
	49		
	50		
-----			

CRITERION  
- NO.  
TRUE

DATA COL 2  
-----  
#NAME?  
#NAME?  
#NAME?  
#NAME?  
#NAME?  
1

* *****	*****	*****
* NUMBER OF ENTRIES:	#NAME?	
* MAXIMUM ENTRY:	#NAME?	
* MINIMUM ENTRY:	#NAME?	
* POPULATION MEAN:	#NAME?	
* STANDARD DEVIATION:		
*       1 SIGMA	#NAME?	
*       2 SIGMA	#NAME?	
*       3 SIGMA	#NAME?	
* VARIANCE:	#NAME?	
*		
* TALLY SUMMARY:		
*		
*		INTERVAL
*		
*       RANGE 1	#NAME?	to
*       RANGE 2	#NAME?	to
*       RANGE 3	#NAME?	to
*       RANGE 4	#NAME?	to
*       RANGE 5	#NAME?	to
*       RANGE 6	#NAME?	to
*       RANGE 7	#NAME?	to

Sheet1

*	RANGE 8	#NAME?	to
*	RANGE 9	#NAME?	to
*	RANGE 10	#NAME?	to
*	RANGE 11	#NAME?	to
*	RANGE 12	#NAME?	to
*	RANGE 13	#NAME?	to
*	RANGE 14	#NAME?	to
*	RANGE 15	#NAME?	to
*	RANGE 16	#NAME?	to
*	RANGE 17	#NAME?	to
*	RANGE 18	#NAME?	to
*	RANGE 19	#NAME?	to
*	RANGE 20	#NAME?	to
*		#NAME?	to
* *****			

## Sheet1

5			
#NAME?	0.01555	0.01555	
#NAME?		0.1555	
#NAME?	#NAME?	#NAME?	1.5555

TABLE

[illegible]

## MAX & MIN

[illegible]

Y VALUES    X VALUES

```
0 #NAME?  
0 #NAME?  
0 #NAME?  
0 #NAME?  
0 #NAME?  
0 #NAME?  
0 #NAME?
```

#NAME?	0 *	0	#NAME?
#NAME?	0 *	0	#NAME?
#NAME?	0 *	0	#NAME?
#NAME?	0 *	0	#NAME?
#NAME?	0 *	0	#NAME?
#NAME?	0 *	0	#NAME?
#NAME?	0 *	0	#NAME?
#NAME?	0 *	0	#NAME?
#NAME?	0 *	0	#NAME?
#NAME?	0 *	0	#NAME?
#NAME?	0 *	0	#NAME?
#NAME?	0 *	0	#NAME?
#NAME?	0 *	0	#NAME?
#NAME?	0 *	0	#NAME?
*****	*****		
	*		

## USING THE BAR CHART WORKSHEET

The BAR worksheet uses macros to automatically calculate range intervals and tally the frequency of occurrences based upon information supplied by the user.

The only thing you have to do is enter the data into the worksheet and determine the number of bars you wish to have plotted. The macros will do the rest.

For your convenience, a table is provided showing the population mean, 1, 2, and 3 standard deviations, the variance, and the intervals used to construct the graph.

If you retrieve a file for editing and you wish to save it again, you must use ED SAVE. This will require you to enter the name of the data file twice, once to erase the old file and a second time to create

(PROCEED TO THE NEXT PAGE)

the file again.

Sometimes pressing the wrong key or the wrong combination of keys can cause a macro to go out of control. If this happens, you can halt a macro at any time by pressing CTRL BREAK (on scroll lock key). Then call the Main menu again by typing ALT M.

Any questions or suggestions for program improvement should be directed to Karen Moore at extension 3281.

(SELECT QUIT TO RETURN TO THE MAIN MENU)



MAIN

ENTER

FILES

TALLY  
IC

GRAPH CONSTRUCT  
Construct a graph (choose TALLY first)  
/XG\G~

/gtbxxrange~ayrange~otf{?}~ts{?}~tx{?}~tyFREQUENCY~qv{esc}{esc}  
/xmgrph~

PRINT /pprstats~oml0~mr80~h{?}~qag  
{esc}{esc}{esc}  
/xmmain~

/xmmain~

VIEW  
View most recently created graph  
{graph}  
{esc}  
/xmgrph~

DATA  
Enter data  
{GOTO}F3~  
/xmenter~

ENTER  
Enter data into the worksheet for processing  
/xg\e~

/xnEnter numeric data:~~  
{down}  
/xmenter~

{?}~  
/re~~  
{down}/m{end}{down}~{up}~  
/ruf3..f52~/xmenter~

SAVE  
Save a newly created data file  
/xgxtr~

/xlEnter the file name: ~\$filename~  
/c\$filename~aa40~  
/fxv

~savearea~  
/xmfiles~

/xnEnter the number of bars (5-20): ~\$numbars~  
/xi\$numbars<5#or#\$numbars>20~/xg\c~  
/rncdbase~f3..f5~/rncdbase~{end}{down}~/rncdata~f3..f5~/rncdata~{end}{down}~/rncerr~f3..f5~/rncerr~{end}{down}~  
{goto}edited~{edit}{down}{edit}{down}{edit}{down}{edit}{down}{edit}{down}{edit}~{home}/xc\t~

## Sheet1

```
/rem10..m30~{calc}/dfM10..M30~min~step~max~{calc}  
/dddbase~table~  
/cbin~freq~/cfreq~yss~/wgpe  
/cnumbars~counter~  
{goto}counter~{edit}+239{calc}~{edit}{home}'~  
{home}/ccounter~range1~/ccounter~range2~  
/rncyrange~q240..q  
  
~/rncxrange~r240..r  
  
~/recounter~  
/xm\b~
```

```
SAVE  
Save graph for external printing  
/gs{?}~q  
/xmgrph~
```

## Sheet1

### FILES

Save, retrieve, and delete worksheet files  
/xmfiles~

### TALLY

Place data in categories and determine frequency  
/xg\c~

### DELETE

Remove a data entry from the worksheet  
/xg\d~

### REVISE

Change a data entry (do not remove)  
/xg\r~

### RETRIEVE

Recall a previously saved data file  
/xgret~

### ED-SAVE

Resave an edited file  
/xgedsv~

/xi\$dmin<.1~/c\$xxsens~\$a~/c\$num~step~{calc}/xr~  
/xi\$dmin<1#and#\$min>.1~/c\$xsens~\$a~/c\$num~step~{calc}/xr~  
/xi\$dmin>1~/c\$sens~\$a~/c\$rounded~step~{calc}/xr~

INFO  
View statistical summary  
/xgla~

QUIT  
Return to Main menu  
/xmmain~



## Sheet1

### GRAPH

Construct a bar chart

/xmgrph~

### PRINT

Obtain listing of tally, population mean, and standard deviation

/xg\p~

### POSITION

Position cursor for data continuation

{?}~

/xmenter~

### QUIT

Return to Main menu

/xmmain~

{?}~

/xmenter~

### DELETE

Erase a file from disk storage

/few{?}~y

/xmfiles~

### CLEAR

Begin new data analysis

/frbar~

/xlEnter the file to retrieve: ~ad39~

{home}/fcce

~

/xmmain~

counter

{goto}stats~  
/xmmove~

## Sheet1

### HELP

View information

/rnchere~~

{goto}hhhelp~

/xmhelp~

### QUIT

Discontinue use of menus

{esc}

### EXIT

Leave this LOTUS program

/Q

### NEXT

Go to next page

{Pgdn}

/xmhelp~

### QUIT

Return to Main menu

/xmmain~

/c\$filename~af39~

/few

~y

/xged~

5

STATS

View table with statistical analysis  
/xg\la~

GRAPH

Construct graph  
/xmgrph~

QUIT

Return to Main menu  
{home}{goto}f3~  
/xmmain~

DOWN

Move cursor down  
{DOWN}  
{DOWN}  
{DOWN}  
{DOWN}  
{DOWN}  
{DOWN}  
{DOWN}  
{DOWN}  
{DOWN}  
/XMMOVE~

UP

Move cursor up  
{UP}  
{UP}  
{UP}  
{UP}  
{UP}  
{UP}  
{UP}  
{UP}  
{UP}  
/XMMOVE~

QUIT

Return to previous menu  
/xm\l~

PREVIOUS	QUIT
Go to preceeding page	Return to Main menu
{pgup}	{home}
/xmhelp~	{goto}here~
	/rndhere~
	/xmmain~