

TI-99/4A

TEX-COMP USERS SUPPLY DIVISION

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This Disk of demo programs was provided by TI to its original dealers when the 99/4 was originally introduced. At that time very little software was available so many dealers provided this disk as a starter to new customers. The programs will all run on either the 99/4 or 4A and are an excellent learning tool for basic programming and the various subjects covered such as personal record keeping. Keep in mind that TE I has now been replaced with TE-II but the sign on procedure is basically the same.

All programs with speech require the Speech Editor Module to be inserted. Some programs can be modified to run with the Extended Basic Module to access the stored speech or with the TE-II to use phonetic speech.

These programs were all placed into the public domain by TI and no rights in same are claimed. We advise making a backup disk for protection which is good practice on any disk. All programs are supplied as is and no warranties or representations are made as to the content of same.

The catalog program can be transferred to other disks to be used as a utility to avoid having to insert the disk manager to run a catalog. Most of these programs will run on cassette should you want to make a copy for a diskless friend.

None of these programs are protected so you can list them for instructional value or for modification. The data files not being programs cannot be run or listed. All programs should run on 16k but a Call Files(1) command should be given to clear out the memory prior to loading.

```

DSK1 - DISKNAME= SALESDEMO
AVAILABLE= 47 USED= 311
FILENAME SIZE TYPE P
-----
&123456& 1 DIS/VAR192
23 1 DIS/VAR192
BASICDEMO 42 PROGRAM
CAT 4 PROGRAM
FISHIN' 16 PROGRAM
JOBCOST 33 PROGRAM
PRK-GRADES 7 PROGRAM
PRK-RECU 6 PROGRAM
PRK-STOCKS 7 PROGRAM
SPEECHDEMO 40 PROGRAM
TE1-DATA 31 DIS/VAR192
TE1-LESSON 51 PROGRAM
TI-TREK 34 PROGRAM
TREKSAY 38 INIT/TK255

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Purpose

This program prints a catalog of programs contained on a diskette. It is a useful substitute for the Disk Manager Command Module.

Use

To load this program type: OLD DSK1.CAT
Once loaded, other diskettes may be inserted into the drive to see their catalogs.

On the BASIC Tutor diskette, type: OLD DSK1.CATALOG

BASIC DEMONSTRATION PROGRAM
JOB COST ESTIMATOR - WOOD FENCE

PURPOSE

This program demonstrates custom application of the TI-99/4 to real-world problems through BASIC programming. This sample program focuses on job costing in a small retail wood fence business.

Custom programming can tailor the TI-99/4 to exactly fit cost estimating requirements of a wide range of businesses - from concrete construction to professional printing. In fact, a little reflection and discussion should show similar opportunities in areas widely divergent from job cost estimation. Such areas as engineering and training are naturals for the color, sound, and speech capabilities of the TI-99/4.

TYPICAL SITUATION

A program, similar to the one demonstrated here, could be written for any of several reasons: a businessman may want to train all of his salesmen in cost estimating procedures, a salesman may need to explore order variations with the customer accurately and quickly, or perhaps the boss wants a clerk to verify orders taken in the field before mailing formal acknowledgements.

This program was written specifically for a salesman to use in the presence of his customer. For that reason, material and labor costs are marked up to reflect retail rather than dealer costs. Also, details such as cost of nails, cement, gate hardware, gate labor, etc., are summarized, even though they are

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individually computed by the program.

PROGRAM USE

This program is generally self explanatory; however, the following step-by-step instructions may be of value:

1. Load the program into the computer from disk (OLD DSK1.JOB-COST) or cassette tape, (OLD CS1) type "RUN" and press ENTER. The computer will spend a few moments preprocessing this lengthy program.
2. The program will ask you to specify which peripherals are attached to the computer. Speech provides user instructions which are also printed on the screen. The printer makes a neat, permanent record of the job specification and the cost summary. A sample of the output is attached.
3. The "Select Style" screen allows you to choose one of five fence styles. Pick any style; if you change your mind, you can answer "No" later to the question, "Selection Correct?"
4. The question "Do you want batten trim?", allows you to choose whether you want the space between boards covered. Try it; you can change your mind later.
5. Once you have selected a style, a new screen asks a series of questions that any fence salesman and most homeowners would understand quickly:
 - a. Style - already chosen in the previous steps.
 - b. Picket Width - 4, 6, 8, 10, or 12 inches are common picket widths.

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- c. Batten Width - preset to 2 inches if batten trim was selected, but you may change it.
 - d. Length - Enter the linear footage run of fence, usually 20 to 500.
 - e. Height - 6, 7 and 8 feet are common heights.
 - f. Wood Type - pick your choice from 1 through 5. (Redwood is the most expensive.)
 - g. Grade - If you pick 2nd grade lumber, you save about 15% on pickets and battens, but you get more knot holes.
 - h. Number of Gates - these add cost in labor and hardware.
 - i. Number of Driveway Gates - these cost even more.
 - j. Number of End Posts - if the fence stops at one corner of the garage and then picks up at another, that makes two runs of fence, not one. There would then be four end posts instead of two. (Gates are taken care of in the gate count; don't add posts for gates.)
 - k. Soil type - rocky soil costs more to dig.
6. If you make a mistake:
Press the space bar twice to erase the entry you are on.
Press SHIFT R (hit R while holding SHIFT) to redo the entire screen.
7. When the last question is answered, the computer computes the following:
- o Number of posts, rails, pickets and battens
 - o Cost of all lumber

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- Cost of pointing pickets
- Cost of nails used
- Cost of gate and driveway gate hardware
- Cost of cement and gravel used
- Total cost of materials
- Labor cost for gates
- Labor cost for posthole digging and setting
- Labor cost for frame and picket nail-up.
- Total cost of labor
- Retail price of labor, material, and total job.

Summary information is rounded to the nearest cent and displayed on the screen.

8. If a printout is made, the salesman could give it to the customer for comparison shopping (assuming the bid was considered a competitive one). The printout could also be stapled to the purchase order as a detailed record of the job description and price agreed upon.
9. To compute alternate job configurations, press any key and select a new style. Simply press "ENTER" to retain previously entered data on the "Job Description" screen - it is kept for easy reuse.

PROGRAM DETAILS

This program could have been done in fewer lines and still have computed cost just as accurately. Many of the graphics, speech, instructions, and fancy input screens are not needed in programs used only by the program author. However, some of the

Job Cost Estimator - Wood Fence

following may be of interest to the intermediate or advanced programmer:

Cost Standards - All standard costs are located at the start of the program to simplify changes.

The Main Program (line 310) gathers information on printer and speech availability and then calls five subroutines:

680 - Misc. Set Up

1400 - Style Selection Activity

2440 - Job Description Screen Display

2630 - Job Description Input

920 - Job Cost Calculation, Display, and Printout

Subroutines called by other subroutines include:

1310 - Displays and Prints Out Job Cost Summary

1450 - Prints out Style Choices

1580 - Sketches Fence Styles

1910 - Adds Battens to Sketch

1990 - Collects Input on Style Selection

2440 - Used to Printout Job Description

2890 - Accepts Data from the Keyboard and Echoes it
on the Screen

3290 - Displays Numeric Data at any Point on the
Screen

3320 - Displays Alphanumeric Data at any Point on the
Screen

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Printers connected to the RS-232 peripheral may be used instead of the TI Thermal Printer if statement 470 is changed. For example, a fast printer could use the following:

470 OPEN #1: "RS232.BAUD=9600"

SAMPLE JOB PRINTOUT

**** JOB DESCRIPTION ****

1. STYLE: CLIP CORNER
2. PICKET WIDTH: 8
3. BATTEN WIDTH: 2
4. LENGTH (FT): 250
5. HEIGHT(FT): 8
6. WOOD TYPE: 2
7. WOOD GRADE (1,2): 1
8. NO. OF GATES: 2
9. NO. OF DRIVE GATES: 1
10. NO. OF ENDPOSTS: 4
11. SOIL (SOFT=1, ROCK=2): 2

WOOD TYPES ARE:

1. TREATED PINE
2. RED CEDAR 3. REDWOOD
4. FIR, ETC. 5. SPRUCE

**** JOB COST SUMMARY ****

NO. OF POSTS: 39
NO. OF RAILS: 110
NO. OF PICKETS: 395

MATERIALS COST: \$ 3515.51
LABOR COST: \$ 498.63

EST. FINAL PRICE: \$ 4014.14

BASIC DEMONSTRATION PROGRAM

BASICDEMO

PURPOSE

This program demonstrates color graphics and sound capabilities of TI BASIC. The example reflects data taken from Texas Instruments' annual report for 1970. A map of TI sites in Dallas county is included to demonstrate fine-line graphics. Musical passages included in the program demonstrate the speed and range of the tone generators.

USE

This program requires only loading and typing of the RUN command. Use "OLD DSK1.BASICDEMO" to load from disk. Use "OLD CS1" for cassette. Because the program is a long one, a brief delay follows typing of the RUN command.

TI-TREK**Abstract**

Author: Texas Instruments

Language: 99/4 Basic

Lines: 510

Hardware: 99/4 Computer and Monitor
Cassette Recorder, or
Disk controller and Drive with
Speech Synthesizer and Editor (optional)

Media: Disk or Cassette
(When using speech, this program requires
a disk-based file to run.)

In TI-TREK, you play the captain of an interstellar warship, patrolling one of the spiral arms of your home galaxy. Your mission is to clear enemy drones from 'warp points' along the interstellar shipping lanes of that arm. Failure will cause the economic downfall of your world.

With the use of the Speech Synthesizer & Speech Editor Command Module, and a special disk database, TI-TREK becomes the first game of its type to speak, giving you verbal cues to the action as it occurs.

STEP 1. Please read the background material presented above to acquaint yourself with both the galactic situation and your mission.

STEP 2. If you wish to use speech, be sure you have the Speech Synthesizer connected to the computer, and the Speech Editor Command Module inserted into the console.

STEP 3. Enter BASIC, type 'CALL FILES(1)' and press enter. Then type 'NEW' and press enter.

STEP 4. Load the program. For the cassette version, use the 'OLD CS1' command. For disks, use the DSK1 drive and 'OLD DSK1.TI-TREK' as the loading command. (To use speech the program must be in the DSK1 drive.)

STEP 5. To run the program type 'RUN' and press enter. In a few seconds TI-TREK will start and the disk version will ask you if speech will be used. Type Y(es) or N(o). If you type 'Y' and have not completed step 2, unpredictable results will occur.

STEP 6. If the directions to utilize speech have been followed correctly, a message will ask for the user's patience as the computer sets up the game. After 15 seconds, the game begins.

After one hyperspace duct was discovered, the rest was easy. By entering a duct a ship could cover light years in seconds. And there were millions of ducts. An intragalactic freeway system was at our command.

After the early years of exploration and colonization, heavy commercial shipping began and the ducts were mapped and regulated. Along each spiral arm of the galaxy 'Warp Points' were set up. These were located parsecs apart, in a roughly square grid. Traffic flows travelled from a local duct to the central warp point of the area, the area being known as a quadrant. Ships could then transfer from warp point to warp point, and finally through a local hyperspace duct to its destination. (As the galaxy is relatively thin, viewed edge-on, only one set of warp points is used, within the galactic plane. Thus the warp points are set up in a roughly two-dimensional array, ten wide and hundreds long.)

Not all worlds are pleased with this arrangement. Many planets have multiple ducts which are used only by local traffic. Most of these planets envy the trade flowing within the quadrants on the grid. To increase their own trade, some of these planets have set up smaller, local duct networks. Some use various gimmicks and giveaways to entice interstellar truckers to detour to them. Any now, some of these worlds are getting nasty.

One or more worlds have sent a swarm of robot ships ('Drones') into the warp point grid. These ships, having set up magnetic 'Energy Mines', are now motionless. They are waiting for the mines to reach the energy levels needed for activation. Once activated, the magnetic disturbances caused by the mines will disrupt and reroute all hyperspace ducts throughout a large section of the grid. The energy mines are thus capable of rendering the warp point system useless. The drones will also track and attack any ships entering the warp point from the duct system, and to defend themselves if attacked.

The galaxy is taking action against this threat. Warships, including yours, have been sent to destroy the enemy drones. Once the drones are gone, the immediate threat of the energy mines is negated, allowing their energy to be absorbed by giant tankers known as 'Base Ships'. These ships also act as supply depots.

Note: The energy/magnetism converters of the mines, (as well as those used by the base ships) make their destruction by normal means foolhardy. Massive quantities of radiation would be released, lightly irradiating all matter about the warp point. Decontamination is possible, but costly.

This is your mission: To destroy all drones in a Bx5 section of the warp point system before the energy mines can be triggered. You may replenish supplies as needed. If any drones are left when time expires your mission will be a failure. Destruction of any mines or base ships during this mission will be frowned upon, and may lead to later court-martial, if not mutation. (And having the price of a planet deducted from your paycheck is no laughing matter either!) Your home solar system's existence is riding on the outcome! You must succeed, or you can kiss your world (and many others) goodbye! **STOP THOSE DRONES!!!!**

L(long Range Scan)

This command uses the communication capability of the hyperspace ducts to report the contents of the 'nearest' warp points. This information is displayed pictorially in the quadrant display area, as well as being stored by the ship's computer for use with the C command. When you are finished with the scan, press ENTER to return you to the quadrant display.

M(ove Locally)

Use this command to move within the current quadrant to dock with a base ship or before launching torpedoes. A movement length of 1 moves you one square in the direction desired. (Thus a diagonal move of 1 is 1.414 times as far as a horizontal one.) Direction is given in degrees as follows: 0 degrees is towards the top of the display, 90 deg is to the right, 180 is down, and 270 is left. The display maintains a constant view to simplify navigation. In addition, the ship's computer monitors the move, stopping your ship if you are about to hit anything, or if you try to move too far from the warp point.

S(hields)

This command raises and lowers protective shields around your ship. Shields decrease the effects of enemy fire by a factor of 3 if they are up. They are automatically dropped when you use the Fire command. Also, shields act automatically to neutralize any 'hard' radiation caused by the destruction of energy mines or base ships, whether raised or not.

STEP 6. As the game begins, you see the warp point (quadrant) that you have just entered after breaking orbit around a nearby planet. (Since the enemy drones have their weapons set to lock on to ships entering the area via the hyperspace duct or ships attacking them, you are not immediately attacked.) This will appear as a 20x20 area in the upper left-hand side of the screen. Your ship, as well as any enemy drones, energy mines, and base ships in the quadrant will be shown. The quadrant number (row, column) appears in the top right corner of the screen. At right center is a readout on ship and galactic status including the amount of torpedoes and energy your ship has, the number of drones remaining in the galactic sector, and the amount of time remaining until the enemy drones trigger the energy mines.

The bottom rows of the screen are used for messages and command entry. If while typing your commands you make a mistake, press the back arrow key (Shift-S) to erase the input line. After typing a command press ENTER to execute it. When using numbers, use only integers. Warning: Any letters used in a numeric response will cause the program to stop!

During most of the contest, the question 'COMMAND?' will appear beneath the quadrant display. Respond by typing the first letter of one of the following commands:

C(hart Galactic Sector)

This command replaces the quadrant display with an 8x5 array of all warp points in this sector, and the known contents of each. The contents are displayed as a 3-digit number (XYZ), with each digit representing the number of enemy drones(X), base ships(Y), and energy mines(Z). Base ships in unexplored quadrants are shown by (?1?). When you are done with this display, pressing ENTER will return you to the quadrant display.

D(ock with Base Ship)

base ship to yours. There is no need to drop your force shield for this as the shields of each ship merge to form a transfer corridor. You may be attacked while adjacent to a base.

F(ire)

This command fires coherent (laser-like) energy beams at enemy ships, the strength of which is not dependent on distance. These beams can be polarized to curve in the magnetic fields of energy mines to reach targets behind them. As this requires some heavy calculating, the aiming is handled by computer, which selects its targets randomly. You get to tell the computer how much energy to expend, however. The ship's computer will destroy as targets ships as it can with the power allotted, giving you a readout on the amount wasted. 100 to 400 units of energy are needed to destroy a drone. The more energy needed to destroy a drone, the more damage it will do when firing at your ship.

Q(uit)

Ends the game. Use this command instead of Shift-C to stop the game before it's normal completion.

T(orpedoes)

This command fires a torpedo at an enemy drone. Firing torpedoes consumes no power, can be done with shields up, and one hit can destroy anything. Torpedoes must be aimed manually, however. (The ship's computer was rather hastily programmed, and tries to compensate for the energy mines' magnetic fields when firing. The torpedoes, however, are non-magnetic! Murphy's Law, circa 2650, strikes again!) Once again, 0 degrees is up, 90 degrees is right, etc. If a torpedo hits an energy mine or base ship, tremendous amounts of 'hard' radiation is released. Your shields labor to neutralize this radiation. Due to the excessive energy drain required for this, the computer is programmed to stop neutralizing once 1/3 to 1/4 of the ship's current energy is used up. (Official policy states the crew, yourself included, can stand some radiation exposure, though you might glow in the dark for awhile.) The moral: Don't hit mines or base ships with torpedoes, if possible.

Note: You have full control of your ship's battle tactics. Your computer will allow you to attack anything, including empty space. (This is a hold-over from previous battles, when against guided opposition, diversionary attacks were useful. In this situation, the only effect of the programming is to allow you to waste energy and torpedoes.)

V(olley Torpedoes)

This command fires 3 torpedoes simultaneously against one or more drones. Both a firing angle and an increment angle are specified. The increment is added to the firing angle of each successive shot. Any increment can be specified from -360 to 360 deg: (The computer can still add!)

W(arp)

Use the hyperspace ducts to move from one warp point to another. The navigation is handled automatically by computer; just tell it the quadrant you wish for your destination. Two notes: First, the energy mines will throw you off course 10% of the time. Second, if any drones are at your destination, they fire as soon as you leave the duct. It is wise to have your shields up. (The drones will also fire at you after you move or attack.)

You win by destroying all of the enemy drones. If either your energy or the remaining time reach zero before this occurs, you lose. If all enemies are destroyed, but you use all your remaining power or time, you still win.

The following are changes to TI-TREK that a user, familiar with TI-99/4 Basic, may wish to make. They are totally optional.

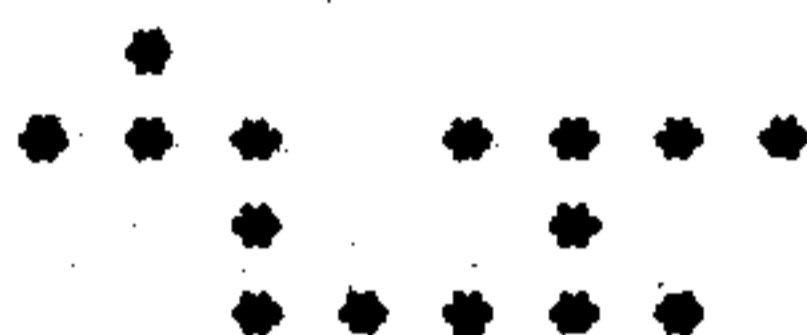
If the program is not being used with the TI-99/4 Color Monitor the color of space may have to be changed. This is due to some TV's being susceptible to large patches of black on the screen. To change the color of space, line 450 of the program should be changed. [450 CALL COLOR(U,V,2)] The '2' inside the parentheses should be changed to the number of the alternate color desired. Once this change is made, the colors of the objects in space may need to be changed. The data statements in lines 5160-5230 of the program control these. The first number in each of these lines (not the ones in quotes) is the color used for the patterns being defined by the data. Change these as needed. The line numbers for each pattern are: 5160 Your ship, 5170 Enemy drone, 5180 Base ship, 5190 Energy Mine, 5200 Torpedo, 5210 Your ship (shield up), 5220-30 Explosions. See the Basic manual for the numbers corresponding to each color, and suggested color combinations.

For a more challenging game, decrease the amount of time allowed to destroy the enemy drones. This can be done by changing line 630. [TM=B*F] The B is being multiplied times the number of enemy ships, to give the total amount of time allowed. For added difficulty, change the B to 7 or 6 (below 6 is not suggested).

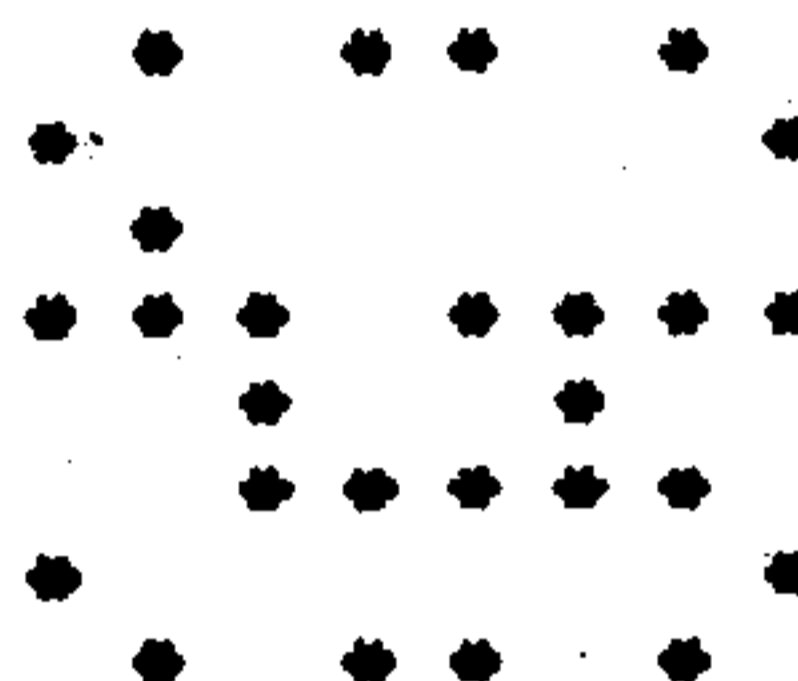
When one or more of the above changes are made, the game should be played to test them. Then the file should be saved, either under a new name, or if the disk is write-protected, on a different disk. (This preserves both the old and new editions.) In the latter case, after loading the program from the new disk, insert the original disk to use the speech file from it.

The following are the symbols used in the quadrant display:

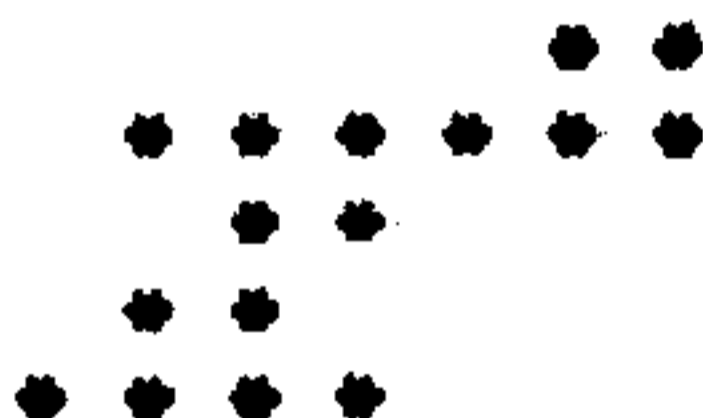
Your ship
Shield Down



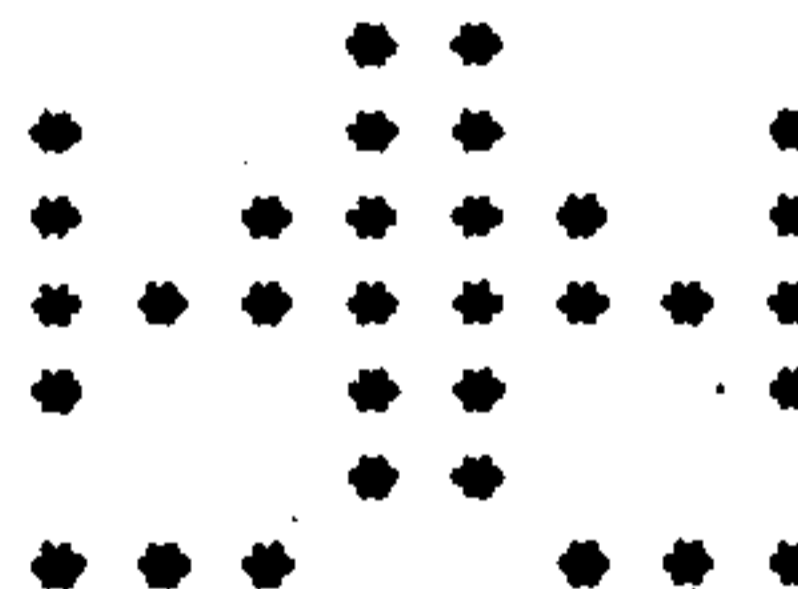
Your Ship
Shield Up



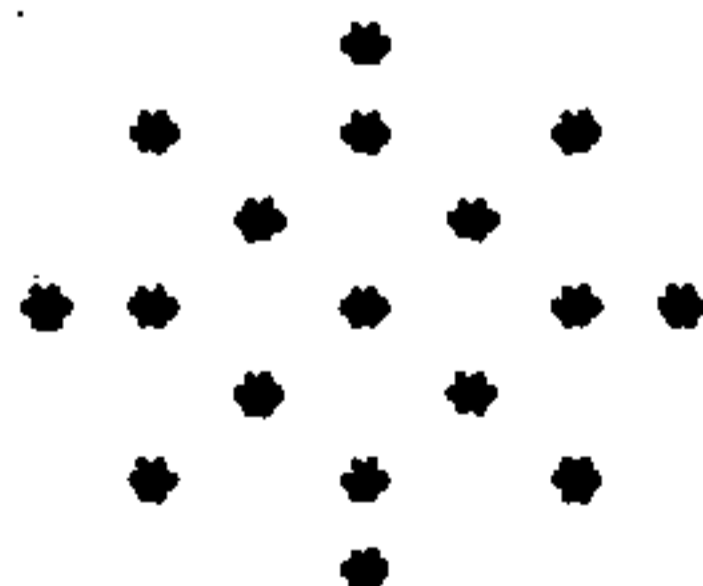
Enemy Ship
(Drone)



Base Ship



Energy Mine



BASIC DEMONSTRATION PROGRAM

FISHIN'

PURPOSE

This program is a single graphic scene which can be left running on the computer to show some of the capability of the TI-99/4. The program represents the work of a twelve year old user.

USE

This program requires only loading and typing of the RUN command. Use "OLD DSK1.FISHIN'" to load from disk. Use "OLD CS1" for cassette.

SALES DEMONSTRATIONS KIT
PERSONAL RECORD KEEPING DATA SET
ACCOUNTS RECEIVABLE

04-04-1980

PURPOSE

This data set provides one illustration of the power of the Personal Record Keeping (PRK) module. The sample data relate to accounts receivable of a medical practice. Reflection on this example should reveal similar applicability to other situations ranging from club dues accounting to personal library management.

TYPICAL SITUATION

A hypothetical one-doctor medical practice generally receives payment on 65% of its invoices at the time of service. However, the other invoices are not being reviewed often enough because the bookkeeper is overloaded with other tasks. The doctor has decided to use the Personal Records Keeping module to do the following:

- Maintain a list of outstanding invoices.
- Sort invoices by date of issue and by alphabetical order.
- Total the invoices, provide summary statistics, and report delinquent balances.
- Cross reference files containing the actual invoice document.

USE

The data set reflects a filing system that the bookkeeper has organized and contains sample invoice information. This demonstration focuses on analysis of data already entered. Initial set-up and periodic data entry are covered in the PRK Owner's Manual.

1. Insert the PRK module into the 99/4. Press any key to get to the main selection screen, select PRK by pressing "3". The program will pause a moment to preprocess the PRK program.
2. Enter today's date, as requested.
3. Respond with a "Y" (Yes) to the printer question, then enter "TP" as the printer name.
4. Select 2, "Load a File" and follow the instructions for cassette (CS1) or other (DSK1.PRK-RECV) data loading.
5. The main selection for PRK provides a menu of activities from data entry to data storage. We will perform two analyses as follows:
 - A. Alphabetize the receivables by account name; print a report showing only patient name and invoice amount; and then compute statistics on invoice amount.
 - 1) Press "5" for Analyze Pages.
 - 2) Press "1" to work with the entire receivables list.
 - 3) Press "3" to reorder the file.
 - 4) Enter "1" to sort on amount of invoice.

- 5) Press "1" to sort from A to Z. This will take about 15 seconds.
 - 6) Press "2" to print a report.
 - 7) Enter "TP" as your printer.
 - 8) Enter "32" as you column width.
 - 9) Enter a suitable title, for example, "INVOICES OUT-
STANDING."
 - 10) Press "3" to print selected items.
Select: Item "1" (Account Name),
Item "5" (Account Due).
- Note: Numbers will appear on the left to show which items will be printed and in which order.
- 11) To press the "BACK" key:
Press and hold the SHIFT key, then press "Z." This indicates the end of print item selection and initiates the printout.
 - 12) Wait for the printout to complete.
 - 13) Press "5" to request statistical analysis.
 - 14) Enter "5", Amount Due, as the item for analysis.
 - 15) Press "SHIFT V" and then "P" to print out the statistics screen.
 - 16) Press "SHIFT Z" three times to get to the main menu for the next report.

B. Select all invoices issued on or before January 31, 1980 that are also over \$40 and print all details contained

on each.

- 1) Press "5" to Analyze Data.
- 2) Press "2" to select specific pages.
- 3) Enter "4" to select on Invoice Date.
Enter "0" as a low date
Enter "80.0131" as a high value.
- 4) Enter "5" to select on Amount Due.
Enter "40" as a low value.
Enter "1000" as a high value.
- 5) Press "SHIFT Z" to indicate no more selection criteria.
- 6) Press "1" to get only the bills that are both old and over \$40 (as opposed to bills that are either old or over \$40.) Wait a moment.
- 7) Press "2" to print pages. "TP" and "32" are still the correct responses.
- 8) Enter a title "OLD INVOICE DETAILS."
- 9) Press "1" for page format and wait for your print-out.

MODIFICATIONS

There are many different reports that can be prepared from this sample data set and there are many different ways the file can be set up. However, several general guidelines apply:

1. All data is resident in the computer during analysis and the amount of memory available is constant. So, the number of

pages that can be tracked depends on the amount of information kept on each. (A disk-based record keeping package is offered that dramatically expands the number of records that can be kept on one file.)

2. Sorting is one of the most time consuming record keeping tasks computers (and humans) do. As the size of your file increases, the time to sort also goes up.
3. Once the file structure is set up, it cannot be changed without reentering the data. So, it may be wise to define a few spare lines to allow for new items.

FILE: ACCTS DUE
 DATE: 3/23/80
 TITLE: INVOICES OUTSTANDING

INDEX
 0 = PAGE #
 1 = ACCT NAME
 2 = PHONE
 3 = INVOICE #
 4 = INV DATE
 5 = AMT DUE
 6 = COMMENT

FILE: ACCTS DUE
 DATE: 3/23/80
 TITLE: INV. BEFORE 2/15/80

INDEX
 0 = PAGE #
 1 = ACCT NAME
 2 = PHONE
 3 = INVOICE #
 4 = INV DATE
 5 = AMT DUE
 6 = COMMENT

0	1	5
1	BAKER, JIM	75.00
2	CHRISTENSEN, G.	35.00
3	COLEMAN, S.	50.00
4	DAWSON, ED	35.00
5	DAWSON, EDWARD	37.50
6	FALLAS, J.	35.00
7	FERRIO, THOMAS	35.00
8	HENSLEY, H.	35.00
9	JOHNSON, RAY	25.00
10	LINDEQUIST, D.	50.00
11	PICARELLI, AL	50.00
12	REESE, JOHN	50.00
13	SMITH, EDGAR	45.00
14	VARGAS, J.	40.00
15	WATKINS, CHAS.	125.00
16	WILSON, C.B.	45.00

0	1	5
1	DAWSON, EDWARD	37.50
2	JOHNSON, RAY	25.00
3	VARGAS, J.	40.00
4	DAWSON, ED	35.00
5	LINDEQUIST, D.	50.00

ITEM STATISTICS

ITEM = AMT DUE
 MEAN = 37.5
 STD DEV = 9.013878189
 MAX VAL = 50
 MIN VAL = 25
 SUM = 187.5
 DATA = 5
 MISSING = 0

ITEM = AMT DUE
 MEAN = 47.96875
 STD DEV = 23.43819443
 MAX VAL = 125
 MIN VAL = 25
 SUM = 767.5
 DATA = 16
 MISSING = 0

FILE: ACCTS DUE
 DATE: 3/23/80
 TITLE: \$40 & UP, BEFORE MA

PAGE # 1
 1.ACCT NAME VARGAS, J.
 2.PHONE 742-9111
 3.INVOICE # 1900
 4.INV DATE 79.1220
 5.AMT DUE 40.00
 6.COMMENT LTR, 2/15

PAGE # 2
 1.ACCT NAME LINDEQUIST, I
 2.PHONE 787-3454
 3.INVOICE # 2120
 4.INV DATE 80.0125
 5.AMT DUE 50.00
 6.COMMENT ANNUAL

PAGE # 3
 1.ACCT NAME WATKINS, CHAS
 2.PHONE 741-9890
 3.INVOICE # 2408
 4.INV DATE 80.0224
 5.AMT DUE 125.00
 6.COMMENT HOSPITAL

PAGE # 4
 1.ACCT NAME SMITH, EDGAR
 2.PHONE 747-8989
 3.INVOICE # 2380
 4.INV DATE 80.0221
 5.AMT DUE 45.00
 6.COMMENT CHK-UP

PAGE # 5
 1.ACCT NAME WILSON, C.B.
 2.PHONE 798-3116
 3.INVOICE # 2420
 4.INV DATE 80.0226
 5.AMT DUE 45.00
 6.COMMENT OFFICE

FILE STRUCTURE

NAME: ACCTS DUE

DATE: 3/26/80

ITEMS/PAGE: 6

PAGES USED: 16

PAGES LEFT: 251

FILE STRUCTURE

ITEM	TYPE	WIDTH	DEC
1	ACCT NAME	CHAR 15	0
2	PHONE	CHAR 8	0
3	INVOICE #	INT 4	0
4	INV DATE	DEC 7	4
5	AMT DUE	DEC 7	2
6	COMMENT	CHAR 10	0

FILE: ACCTS DUE

DATE: 3/23/80

TITLE: DETAIL, ALL INVOICES

INDEX

- 0 = PAGE #
- 1 = ACCT NAME
- 2 = PHONE
- 3 = INVOICE #
- 4 = INV DATE
- 5 = AMT DUE
- 6 = COMMENT

0	1	2	3	4	5	6
1	DAWSON, EDWARD	545-9890	1830	79.1210	37.50	CHECKUP
2	BAKER, JIM	742-3894	2610	80.0325	75.00	EKG, ETC
3	WATKINS, CHAS.	741-9890	2408	80.0224	125.00	HOSPITAL
4	SMITH, EDGAR	747-8989	2380	80.0221	45.00	CHK-UP
5	JOHNSON, RAY	747-9812	2300	80.0211	25.00	LAB
6	VARGAS, J.	742-9111	1900	79.1220	40.00	LTR, 2/15
7	DAWSON, ED	676-8799	2102	80.0121	35.00	OFFICE
8	LINDERQUIST, D.	787-3454	2120	80.0125	50.00	ANNUAL
9	HENSLEY, H.	787-9443	2385	80.0221	35.00	OFFICE
10	WILSON, C.B.	798-3116	2420	80.0226	45.00	OFFICE
11	FALLAS, J.	989-7678	2550	80.0310	35.00	
12	CHRISTENSEN, G.	787-9878	2560	80.0318	35.00	
13	FERRIO, THOMAS	741-9834	2612	80.0325	35.00	OFFICE
14	PICARELLI, AL	791-2324	2616	80.0325	50.00	ANNUAL
15	COLEMAN, S.	897-4445	2621	80.0326	50.00	ANNUAL
16	DEESE, JOHN	898-7878	2422	80.0324	50.00	ANNUAL

SALES DEMONSTRATION KIT
PERSONAL RECORD KEEPING DATA SET
PORTFOLIO

04-03-1980

PURPOSE

This data set provides another illustration of the power of the Personal Record Keeping (PRK) module. One specific application of personal financial management is demonstrated. This example should suggest other record keeping applications (from phonograph record catalogs to personal real estate) that can be addressed by creative application of the PRK manual.

TYPICAL SITUATION

A hypothetical, diversified investor has accumulated a sufficient number of stock certificates that he would like help in storing, sorting, and totaling information on his holdings. The investor has decided to use PRK to do the following:

- Record the location, certificate number, total basis, purchase date, number of shares, and recent quote of each security.
- Compute the current market value and gain of each security and of the complete portfolio.
- Sort-out long and short term gains (loses).
- Sort-out all certificates on a given company holding.

USE

The data set in this demonstration reflects the file set up by the hypothetical investor and sample certificate information

entered by him. Explanation of set-up and data entry procedures are left to the PRK manual. These instructions guide you in the loading and analysis of the Portfolio demonstration:

1. Insert the PRK module into the 99/4. Press any key to get to the main selection screen, select PRK by pressing "3." The program will pause a moment to preprocess the PRK program.
2. Enter today's date, as requested.
3. Respond with a "Y" (Yes) to the printer question, then enter "TP" as the printer name.
4. Select 1, "Load a File" and follow the instructions for cassette (CS1) or "other" ("DSK1.PRK-STOCKS") data loading.
5. The main selection for PRK provides a menu of activities from data entry to data storage. We will perform two analysis as follows:
 - A. Print a summary report showing only stock name, number of shares and market value for each certificate. Then print summary statistics on value.
 - 1) Press "6" to print a report. Enter "TP" as the printer. Then enter "32" as the character width.
 - 2) ~~"Title the printout 'SUMMARY OF HOLDINGS'."~~
 - 3) Press "3" to select items to be listed in the report.
 - 4) Press "1", enter "2", enter "8", and "ENTER" to choose printout columns.

- 5) Press "SHIFT Z"; the report will begin printing.
- 6) When the report is complete, press "5", "1", and "5" to call up the statistics function.
- 7) Select item "8", Market Value, as the subject of the analysis.
- 8) Press "SHIFT V" and then "P" to print out the statistics as market value.
- 9) Press "SHIFT Z" three times to get back to the main index.

B. Identify and print a report of all certificates with a net gain of \$1000 on more which were purchased on or before 6/30/79.

- 1) Press "5" to analyze pages.
- 2) Press "2" to analyze selected pages.
- 3) Enter item "9" to select by GAIN/LOSS. Enter low value of "1000" and a high value of (arbitrarily) "1,000,000."
- 4) Enter item "5" to select by purchase date. Enter a "low" date of (arbitrarily) "48.0101" and a high value of "79.0630."
- 5) Press "SHIFT Z" to indicate the end of selection criteria.
- 6) Press "1" to select only those certificates that pass both criteria (selection only takes a moment).

- 7) Press "2" to print a report. Enter both "TP" and "32" again.
- 8) Title the report "LT GAINS OVER \$1000."
- 9) Press "1" to print out all details for each certificate identified.

MODIFICATIONS

There are a number of value reports that can be prepared from this data set. Try picking out all stocks that are held at BACHE, or that are held for Shannon. Pick out all stocks that are short term loss. Pick out all ATT certificates. Rank order the portfolio by market gain.

Use this example data set and its sample reports to suggest ways the Personal Record Keeping module and the TI-99/4 can be of value to you.

FILE: STOCKS
 DATE: 4/1/80
 TITLE: SUMMARY OF HOLDINGS

- INDEX
 0 = PAGE #
 1 = COMPANY
 2 = SHARES
 3 = CERT. NO.
 4 = TOT BASIS
 5 = PUR. DATE
 6 = NEW QUOTE
 7 = Q. DATE
 8 = MKT VALUE
 9 = GAIN/LOSS
 10 = LOCATION
 11 = COMMENT

0	1	2	8
1	ATT	200	9350.00
2	ATT	100	4675.00
3	ATLRICH	100	8350.00
4	DIEBOLD	50	1606.25
5	EXXON	100	5587.50
6	GREYH	50	737.50
7	MCDNLD	100	3612.50
8	PANAM	100	412.50
9	USGYPS	150	3937.50
10	USGYPS	50	1312.50

ITEM STATISTICS

ITEM = MKT VALUE
 MEAN = 3958.125
 STD DEV = 3111.342447
 MAX VAL = 9350
 MIN VAL = 412.5
 SUM = 39581.25
 DATA = 10
 MISSING = 0

FILE STRUCTURE

NAME: STOCKS
 DATE: 4/1/80
 ITEMS/PAGE: 11
 PAGES USED: 10
 PAGES LEFT: 139

FILE STRUCTURE

ITEM	TYPE	WIDTH	DEC
1	COMPANY	CHAR	9 0
2	SHARES	INT	4 0
3	CERT. NO.	CHAR	10 0
4	TOT BASIS	DEC	10 2
5	PUR. DATE	DEC	7 4
6	NEW QUOTE	DEC	7 3
7	Q. DATE	DEC	7 4
8	MKT VALUE	DEC	10 2
9	GAIN/LOSS	DEC	10 2
10	LOCATION	CHAR	10 0
11	COMMENT	CHAR	15 0

FILE: STOCKS
 DATE: 4/1/80
 TITLE: LT GAINS OVER \$1

PAGE # 1
 1. COMPANY ATT
 2. SHARES 200
 3. CERT. NO. XY1234567
 4. TOT BASIS 8025.00
 5. PUR. DATE 79.0428
 6. NEW QUOTE 46.750
 7. Q. DATE 80.0326
 8. MKT VALUE 9350.00
 9. GAIN/LOSS 1325.00
 10. LOCATION 1ST NAT
 11. COMMENT

PAGE # 2
 1. COMPANY ATRLICH
 2. SHARES 100
 3. CERT. NO. 623ZXY211
 4. TOT BASIS 4675.00
 5. PUR. DATE 78.1001
 6. NEW QUOTE 33.500
 7. Q. DATE 80.0326
 8. MKT VALUE 8350.00
 9. GAIN/LOSS 3675.00
 10. LOCATION BACHE
 11. COMMENT

PAGE # 3
 1. COMPANY EXXON
 2. SHARES 100
 3. CERT. NO. X2223243
 4. TOT BASIS 3000.00
 5. PUR. DATE 78.0615
 6. NEW QUOTE 55.875
 7. Q. DATE 80.0326
 8. MKT VALUE 5587.50
 9. GAIN/LOSS 2587.50
 10. LOCATION M LYNCH
 11. COMMENT

PAGE # 4
 1. COMPANY MCDNLD
 2. SHARES 100
 3. CERT. NO. MCD00124
 4. TOT BASIS 1500.00
 5. PUR. DATE 78.0601
 6. NEW QUOTE 36.125
 7. Q. DATE 80.0326
 8. MKT VALUE 3612.50
 9. GAIN/LOSS 2112.50
 10. LOCATION M LYNCH
 11. COMMENT SHANNON

FILE: STOCKS
 DATE: 4/1/80
 TITLE: PORTFOLIO DETAILS

- INDEX
 0 = PAGE #
 1 = COMPANY
 2 = SHARES
 3 = CERT. NO.
 4 = TOT BASIS
 5 = PUR. DATE
 6 = NEW QUOTE
 7 = Q. DATE
 8 = MKT VALUE
 9 = GAIN/LOSS
 10 = LOCATION
 11 = COMMENT

0	1	2	3	4	5	6	7
1	ATT	200	XY1234567Z	8025.00	79.0428	46.750	80.0326
2	ATT	100	XY2345678A	3975.00	79.0228	46.750	80.0326
3	ATLRICH	100	623ZXY211	4675.00	78.1001	83.500	80.0326
4	DIEBOLD	50	DB10200AA	1743.75	80.0130	32.125	80.0326
5	EXXON	100	X22232433Z	3000.00	78.0615	55.875	80.0326
6	GREYH	50	1200226BB	600.00	77.0630	14.750	80.0326
7	MCDNLD	100	MCD0012450	1500.00	78.0601	36.125	80.0326
8	PANAM	100	727747DC9	775.00	79.0630	4.125	80.0326
9	USGYPS	150	352321XXXZ	5250.00	78.1201	26.250	80.0326
10	USGYPS	50	123456XXXZ	1600.00	78.1101	26.250	80.0326

0	8	9	10	11
1	9350.00	1325.00	1ST NAT	
2	4675.00	700.00	1ST NAT	
3	8350.00	3675.00	BACHE	
4	1606.25	-137.50	BACHE	SHANNON'S
5	5587.50	2587.50	M LYNCH	
6	737.50	137.50	M LYNCH	GIFT FROM JOE
7	3612.50	2112.50	M LYNCH	SHANNON'S
8	412.50	-362.50	1ST NAT	
9	3937.50	-1312.50	BACHE	
10	1312.50	-287.50	BACHE	

SALES DEMONSTRATION KIT
PERSONAL RECORD KEEPING DATA SET

GRADES

PURPOSE:

This data set can be used to illustrate statistical capabilities of the Personal Record Keeping module. The teacher's grade book example provided may suggest completely different applications with similar analytical requirements.

This data set is also well suited for demonstration of the Statistics Command module. Sample printed output from a session with that module is attached.

TYPICAL SITUATION:

A language arts teacher in a public school system has implemented a new reading project. She must report initial, mid-year, and end-of-year reading level of each student. More important, she must measure reading level growth and the impact of attendance and other factors on growth.

USE OF PRK:

1. Insert the Personal Record Keeping (PRK) module and then select PRK by pressing "3".
2. After a moments pause you enter today's date, as requested.
3. Respond with a "Y" (Yes) to the printer question, then enter "TP" as the printer name.
4. Select 2, "Load a File", and follow the instructions for cassette ("CS1") or other ("DSK1.PRK-GRADES") data loading.

PERSONAL RECORD KEEPING DATA SET

GRADESUSE OF PRK (CONT'D):

4. The main selection for PRK provides a menu of activities from data entry to data storage. We will perform three analyses as follows:

A. Compute and printout descriptive statistics on student reading improvement (Growth), on the final reading level (Final), and on Absences.

- 1) Press "5" to analyze pages.
- 2) Press "1" to analyze all pages.
- 3) Press "5" to call up the statistics function.
- 4) Enter item "8", Growth, as the subject of the analysis.
- 5) Press "Shift V" and then "P" to print.
- 6) Repeat steps 4) and 5) to analyze "Final" and "Absences".
- 7) Press shift-Z to return to the main analysis menu.

B. Compute the predictive power of attendance on reading level growth and of the initial reading skill on growth.

- 1) Press "4" for linear fit.
- 2) Enter "4" to select Absence as the "independent variable," X.
- 3) Enter "8" to select Growth as the "dependent variable," Y.

PERSONAL RECORD KEEPING DATA SET

GRADES

USE OF PRK (CONT'D):

- 4) Wait about 10 seconds.
 - 5) Press "Shift V" and then "P" to print.
 - 6) Press "Shift Z" to return to Linear Fit screen.
 - 7) Repeat steps 2 - 6 to compute Growth as a function of initial skill (Pretest).
 - 8) Press Shift Z three times to return to main index.
- C. Print a report listing the name, final score, and growth of each 6th grade student reading at or above 6.9 at the end of the year. Then print a report listing those 6th graders falling below the norm.
- 1) Press "5" to analyze pages.
 - 2) Press "2" to select pages.
 - 3) Enter item "2" to select by Grade.
 - 4) Enter a low value of "6" and then a high value of "6". (Only grade six will be analyzed.)
 - 5) Enter item "7" to select by final score.
 - 6) Enter a low value of "6.9" and then a high value of, say, "12."
 - 7) Press "Shift Z" to quit entering selection criteria.
 - 8) Press "1" to select only those students meeting both criteria.
 - 9) Press "2" to print a report. Enter "TP" as the printer

PERSONAL RECORD KEEPING DATA SET

GRADES

USE OF PRK (CONT'D):

name, and then enter "32" as the column width.

10) Title the report "ABOVE NORM, GRADE 6".

11) Press 3 to print selected columns.

12) Press "1", "ENTER", "7", "ENTER", "8", and "ENTER" to identify items to be printed in report.

13) Press "Shift Z" to print report.

14) After report completes, repeat steps 1) through 13).

Modify steps 6) and 10) to get the grades between 0 and 6.8 (students below their norm).

SAMPLE STATISTICS MODULE ANALYSIS:

Reports generated from the statistics module are included for your information. The PRK and statistics modules operate very much alike. However, more statistically oriented names are used for items (variables) and pages (observations).

ITEM STATISTICS

FILE: GRADES
DATE: 4/8/80
TITLE: ABOVE NORM, GRADE 6

LINEAR FIT

ITEM = GROWTH
MEAN = .9565217391
STD DEV = .3799833572
MAX VAL = 1.7
MIN VAL = .2
SUM = 22
DATA = 23
MISSING = 0

X = ABSENCES
Y = GROWTH

Y = A*X + B

A = -.0984260231
B = 1.363064008

STD ERR EST = .1912465061
CORRELATION = -.8707473859

INDEX

- 0 = PAGE #
- 1 = NAME
- 2 = GRADE
- 3 = SEX
- 4 = ABSENCES
- 5 = PRETEST
- 6 = MIDTERM
- 7 = FINAL
- 8 = GROWTH
- 9 = RANK

	0	1	7	8
1	GAMES, AARON	7.7	1.4	
2	GRAY, PAM	8.4	1.4	
3	KIRKLAND, SUSAN	7.2	1.2	
4	LYNN, CYNTHIA	7.5	1.2	
5	MEDINO, T.	7.1	.5	
6	MORALES, J.	7.2	1.2	
7	RODRIGUE, J.	7.2	.6	
8	SANFORD, W.	8.1	1.1	
9	SIMPSON, D.	7.6	.6	

ITEM STATISTICS

LINEAR FIT

ITEM = FINAL
MEAN = 7.043478261
STD DEV = .8617245325
MAX VAL = 8.4
MIN VAL = 4.7
SUM = 162
DATA = 23
MISSING = 0

X = PRETEST
Y = GROWTH

Y = A*X + B

A = -.0240880503
B = 1.103144654

STD ERR EST = .3884339357
CORRELATION = -.0502545465

FILE: GRADES
DATE: 4/8/80
TITLE: BELOW NORM, GRADE 6

INDEX

- 0 = PAGE #
- 1 = NAME
- 2 = GRADE
- 3 = SEX
- 4 = ABSENCES
- 5 = PRETEST
- 6 = MIDTERM
- 7 = FINAL
- 8 = GROWTH
- 9 = RANK

	0	1	7	8
1	CHENAULT, B.	6.8	1.7	
2	GRAY, MICKEY	4.7	.7	
3	GARCIA, JUANITA	6.8	1.4	
4	GARCIA, ROD	6.3	.6	
5	ANDERSON, ART	6.4	.5	
6	JONES, THOMAS	5.7	.2	

ITEM STATISTICS

ITEM = ABSENCES
MEAN = 4.130434783
STD DEV = 3.361606053
MAX VAL = 10
MIN VAL = 0
SUM = 95
DATA = 23
MISSING = 0

FILE: GRADES
 DATE: 4/8/80
 TITLE: DETAILS, BY GROWTH

INDEX

- 0 = PAGE #
- 1 = NAME
- 2 = GRADE
- 3 = SEX
- 4 = ABSENCES
- 5 = PRETEST
- 6 = MIDTERM
- 7 = FINAL
- 8 = GROWTH
- 9 = RANK

0	1	2	3	4	5	6	7	8	9
1	JONES, THOMAS	6 M		10	5.5	5.5	5.7	.2	22
2	WILLIAMSON, RON	7 M		8	7.0	7.3	7.5	.5	8
3	ANDERSON, ART	6 M		6	5.9	6.3	6.4	.5	18
4	GARCIA, ROD	6 M		8	5.7	6.0	6.3	.6	19
5	HENDRIX, JIMMY	7 M		9	5.7	6.1	6.3	.6	20
6	KENNY, CARMELLA	7 F		9	7.3	7.9	8.0	.7	3
7	GRAY, MICKEY	6 M		8	4.0	4.3	4.7	.7	23
8	PERKINS, A.	5 F		7	5.3	5.8	6.0	.7	21
9	SIMPSON, D.	6 M		4	6.8	7.4	7.6	.8	7
10	GARCIA, PETER	7 M		5	7.0	7.5	7.8	.8	5
11	RODRIGUE, J.	6 M		1	6.4	6.8	7.2	.8	12
12	HENDERSON, JIM	7 M		2	6.9	7.4	7.8	.9	4
13	MEDINO, T.	6 M		4	6.2	6.5	7.1	.9	13
14	SANFORD, W.	6 M		3	7.0	7.3	8.1	1.1	2
15	WATKINS, ASHLEY	5 F		1	5.9	6.4	7.1	1.2	14
16	KIRKLAND, SUSAN	6 F		4	6.0	7.0	7.2	1.2	10
17	LYNN, CYNTHIA	6 F		2	6.3	6.9	7.5	1.2	9
18	MORALES, J.	6 F		3	5.9	6.4	7.2	1.3	11
19	GAMES, AARON	6 M		0	6.3	7.0	7.7	1.4	6
20	SANFORD, MARION	5 F		0	5.4	6.0	6.8	1.4	16
21	GARCIA, JUANITA	6 F		1	5.4	6.0	6.8	1.4	17
22	GRAY, PAM	6 F		0	7.0	7.5	8.4	1.4	1
23	CHENAULT, B.	6 F		0	5.1	6.0	6.8	1.7	15

MEAN, ETC. FOR FINAL

 N (NON-MISSING) 23
 MISSING VALUES 0
 MEAN 7.043478261
 STD DEV .8617245325
 STD ERR .179681986
 VARIANCE .7102835539
 MINIMUM 4.7
 MAXIMUM 8.4
 RANGE 3.7
 SUM X 162
 SUM X2 1157.38
 SUM X3 8370.624
 SUM X4 61188.8314
 COEFF. VAR. 12.23436065
 SKEWNESS -.7806192063
 KURTOSIS .3031640157
 T (H0: MU=0) 39.2
 PR(T) .001

PRESS P TO PRINT
 PRESS BACK WHEN FINISHED

LINEAR REGRESSION

 Y = A*X + B

 Y = GROWTH
 X = ABSENCES

 A = -.0984260231
 STD ERR .0121292892
 B = 1.363064008
 STD ERR .0640324987

 N 23
 CORRELATION -.871
 SIGNIFICANCE LEVEL .001
 STD ERR ESTIMATE .1912465061

 PRESS P TO PRINT
 PRESS BACK WHEN FINISHED

T TEST
 FOR INDEPENDENT GROUPS

 GRP 1 GRP 2

 N 13 10
 M .7538461538 1.22
 SD .2989297147 .3119829051

T VALUE -3.631
 DEGREES OF FREEDOM 21
 SIGNIFICANCE LEVEL .001
 STRENGTH OF ASSOC. .621

PRESS P TO PRINT
 PRESS BACK WHEN FINISHED

FREQUENCIES FOR FINAL

VALUE	FREQ	PCT	ACCUM PCT
4.7	1	4.3	4.3
5.7	1	4.3	8.7
6	1	4.3	13
6.3	2	8.7	21.7
6.4	1	4.3	26.1
6.8	3	13	39.1
7.1	2	8.7	47.8
7.2	3	13	60.9
7.5	2	8.7	69.6
7.6	1	4.3	73.9
7.7	1	4.3	78.3
7.8	2	8.7	87
8	1	4.3	91.3
8.1	1	4.3	95.7
8.4	1	4.3	100

 TOTAL FREQUENCY 23

PRESS P TO PRINT
 PRESS BACK WHEN FINISHED

LINEAR REGRESSION

 Y = A*X + B

 Y = GROWTH
 X = PRETEST

 A = -.0240880503
 STD ERR .1044642098
 B = 1.103144654
 STD ERR .641006674

 N 23
 CORRELATION -.05
 SIGNIFICANCE LEVEL .82
 STD ERR ESTIMATE .3884339357

 PRESS P TO PRINT
 PRESS BACK WHEN FINISHED

ANALYSIS OF VARIANCE RESULTS
DEPENDENT VARIABLE MEANS

23

MEAN(PRETEST) 6.086956522

STD DEV .7927537436

USE b FOR MORE MEANS
PRESS P TO PRINT
PRESS ENTER FOR SOURCE TABLE
PRESS BACK WHEN FINISHED

ANALYSIS OF VARIANCE RESULTS
DEPENDENT VARIABLE MEANS

N 23

MEAN(ABSENCES) 4.130434783

STD DEV 3.361606053

USE b FOR MORE MEANS
PRESS P TO PRINT
PRESS ENTER FOR SOURCE TABLE
PRESS BACK WHEN FINISHED

ANALYSIS OF VARIANCE RESULTS
SOURCE TABLE (1 OF 2)

SOURCE	DF	SS
COLUMNS	1	44.02173913
ROWS	22	124.8565217
RESIDUAL	22	137.5782609
TOTAL	45	306.4565217

PRESS P TO PRINT
PRESS ENTER FOR SOURCE TABLE
PRESS BACK WHEN FINISHED

ANALYSIS OF VARIANCE RESULTS
SOURCE TABLE (2 OF 2)

MS	F	PR(F)
44.02173913	7.03947160	.015
5.675296443	.907530891	.589
6.253537312		
6.810144928		

PRESS P TO PRINT
PRESS ENTER FOR MEANS
PRESS BACK WHEN FINISHED

ANALYSIS OF VARIANCE RESULTS
DEPENDENT VARIABLE MEANS

INDEPENDENT
VARIABLES VALUES

SEX M

N 13

MEAN(GROWTH) .7538461539

STD DEV. .2989297147

USE b FOR MORE MEANS
PRESS P TO PRINT
PRESS ENTER FOR SOURCE TABLE
PRESS BACK WHEN FINISHED

ANALYSIS OF VARIANCE RESULTS
DEPENDENT VARIABLE MEANS

INDEPENDENT
VARIABLES VALUES

SEX F

N 10

MEAN(GROWTH) 1.22

STD DEV .3119829055

USE b FOR MORE MEANS
PRESS P TO PRINT
PRESS ENTER FOR SOURCE TABLE
PRESS BACK WHEN FINISHED

ANALYSIS OF VARIANCE RESULTS
SOURCE TABLE (1 OF 2)

SOURCE	DF	SS
BETWEEN	1	1.228214047
ERROR	21	1.948307692
TOTAL	22	3.176521739

PRESS P TO PRINT
PRESS ENTER FOR SOURCE TABLE
PRESS BACK WHEN FINISHED

ANALYSIS OF VARIANCE RESULTS
SOURCE TABLE (2 OF 2)

MS	F	PR(F)
1.228214047	13.2384094	.002
.0927765568		
.1443873518		

PRESS P TO PRINT
PRESS ENTER FOR MEANS
PRESS BACK WHEN FINISHED

TERMINAL EMULATOR I/MICRONET LESSON SPECIFICATION

I. PURPOSE

Timesharing is one of three main sources of utility of the home computer (the other two are command modules and BASIC programs). However, timesharing requires the most persistence of the novice and risks the most frustration during the initial stage.

This BASIC program is intended to acquaint the potential timesharing user with a few key details of the Terminal Emulator I (TE I) Command Module's operation and of Micronet Log-on Procedures. The program is a combination of merchandising information, highlights from the TE I manual, and practice sessions with a TE I simulation in BASIC.

This document outlines the sequential flow planned for program, presents a flow chart, and will be completed with a program listing.

USE

Because this is a very long program, you must enter the BASIC command "CALL FILES (1)" before loading from a disk.

Load the BASIC program into the computer from disk ("OLD DSK1.TEL-LESSON") or from cassette ("OLD CS1"). Type RUN.

Remember, this is a lesson, so pay attention and take notes.

II. SEQUENTIAL FLOW

- A. Screen 1 - Intro to time sharing. Text similar to the following will be presented first:

TERMINAL EMULATOR I

This module works with your computer and its peripherals to open a whole new world of outside service and information:

- News, weather and sports right off the wire.
- Electronic mail and classified ads.
- Remote shopping, banking, and financial service.
- Restaurant, movie and other consumer guides.
- And much, much more.

Press ENTER to CONTINUE

B. Screen 2 - Introduction to this program

ABOUT THIS PROGRAM

The program you are seeing now is a training exercise that:

- Demonstrates a few key features of the module Terminal Emulator I (TE I).
- Provides a simulation of data base log-on.
- Is followed by a set of data taken from an actual timesharing session.

C. Screen 3 - Introduction to TE I set-up

INITIAL SET-UP

Following this screen is a simulation of TE I set-up. The set-up function:

- Allows you to model the TI-99/4 after nearly any terminal.
- Is preset to the most often used configuration.
- Can usually be completed simply by pressing ENTER.
- Is explained in the manual in detail on pp. 10-14.

Press ENTER to see the simulation

- ### D. Screen 4 - Set-up screen as currently coded, with simulation included if space permits.
- ### E. Screen 5 - Command and Control.

TE I COMMANDS

High priority, imperative commands control the terminal and remote data base during timesharing. These commands:

- Are set apart from regular messages by preceeding them with Shift V (CMD).
- Are enabled when the cursor is blinking.
- Include:
 - Control Characters
 - Paging
 - Printing
 - And others (see manual, pp. 19-27)

Press ENTER to continue

F. Screen 6 - Control Characters

CONTROL CHARACTERS

These commands direct a remote computer to perform such common functions as:

- Control C - Terminate current activity
- Control H - Backspace

Control characters are issued by following the following sequence when using TE I:

- Press V while holding down Shift (Shift-V).
- Press 2 (Note that screen color changes to denote a control character).
- Press C (Or any other desired control character).
- Enter is not required.

Press ENTER for a practice session

G. Screen 7 - Control Character practice session. This screen is driven by a subroutine that performs as follows:

- Step 1. Print:
 - "Send a control C
 - OR
 - Press ENTER to skip practice session"
- Step 2. Wait for 10 seconds for input; if none, go to

Screen 6.

- Step 3. a. If input is indeed a "Shift-V, 2, X":
Print out "Command X just transmitted" Go to Step 5.
- b. If input is "VXX":
Print out "You must hold down the shift key while typing V". Increment error count and go to Step 4.
- c. If input is "Shift V C":
Print out "You forgot to hit 2 after Shift-V". Increment error count and go to Step 4
- d. If any other input:
Print out "Wrong key sequence, please try again".
- Step 4. If more than 4 errors, go to Screen 6. Otherwise, go back to Step 1.
- Step 5. Print "Now try control -H". Loop back through Steps 2-4.
- Step 6. Go on to next screen.

H. Screen 8 - Log on Practice

PRACTICE MICRONET LOG-ON

The data base LOG-ON procedure will soon be easy for you. However, a little practice may be in order. Jot down these numbers:

- Terminal Identifier - A. (Describes terminal to remote computer).
- Micronet's "phone number".
- Password (Private key to your account)
- Etc. Expand as needed

The information above will be used in the following log-on practice.

These values are only for practice, your data base will assign new numbers when you subscribe.

Assume that you are signed-up, set-up, and dialed-up!

Press ENTER for practice LOG-ON

I. Screen 9 - Log-on Practice

Sub-routine as currently written for log-on practice

with these additions:

- Print out expected inputs on thermal printer, in advance. If error happens twice, fill in correct value.
- Reflect sample Micronet log-on procedure.

J. Screen 10 - Paging

PAGE STORAGE AND REVIEW

TE I can store, record, review, and print over 16 screens of received text.

- Shift-V Shift - Pages forward one screen at a time.
- Shift-V Shift - Pages backward one screen at a time.
- Shift or (without Shift-V) scrolls one line at a time.
- Note - The first use of a paging command always jumps to the oldest screen not yet reviewed.

Press ENTER to continue

K. Screen 11 - Loading and Saving Data from Disk Loading and Saving Data

Page 12 of the TE I manual describes loading data from disk or tape. In brief:

- Insert TE I into the home computer and advance to the set-up screen.
- Change DEVICE from RS232.1 to DSK1.
- Enter file name as "TEIDATA"
- Press ENTER to initiate loading.
- Scroll through loaded data.
- Print any pages desired by pressing: SHIFT-V 3 (See pp. 20-23).

Press ENTER to continue

L. Screen 12 - Sample Data Set

Sample Micronet Data

You have now reviewed and practiced these key steps to data base use:

- Log-on
- Control key transmission

A data set from an actual session with Micronet is available on disk (or cassette) for you to practice:

- Data loading
- Paging
- Printing

Now, plug in TE I and load this material to see what Micronet offers.

Better yet, log-on (if your dealer has a password).

MicroNET Adds Three New Cities
03/27/80

As of 03/27/80, the following new phone numbers are available for MicroNET users:

Mountain View, Ca	415/961-5665
Orange County, Ca	714/530-8212
Princeton, NJ	609/921-1849

For a complete list of available phone numbers, enter the following:

TYP SYS:PHONE
or
TYP SYS:TYPNUM.TXT

MicroNET Staff on CB.
03/27/80

Real-Time Star Trek
03/20/80

All Star Trek fans take note. There is a new real-time Star Trek version now available on MicroNET. To run the program, enter: R PIRETS

To read the program documentation, enter TYP SYS:PIRETS.DOC

You may request a line printer listing (15 pages for \$3.50) by entering:
R PRINT
then
PRINTMH SYS:PIRETS.DOC

If you encounter any problems with this new program, please contact us via FEEDBK.

CB (Citizen's Band Radio Simulator)
is Now Available on MicroNET
02/22/80

CB is MicroNET's unique simulation of the 11 meter Citizen's Band radio for multiple users.

Just log onto MicroNET, request the CB program and you can "talk" to your good buddies all across the country via your personal computer or terminal.

Complete instructions on how CB works may be obtained by entering: TYP SYS:CB.DOC

After you have read the instructions you may request CB by entering: R CB

Use of the Bulletin Board (BULLET) is a good way to prearrange CB sessions with other users.

MicroQuote, an Easy-To-Use Securities Information System for Personal Computer Users is Available on MicroNET
01/17/79

MicroQuote is a securities information system which features a database of statistics and information on more than 32,000 stocks, bonds and options.

The easy-to-use system is specifically designed for personal computer users and is the most comprehensive offering of its kind.

MicroQuote provides fast access to a variety of information on securities traded on exchanges and over-the-counter.

MicroQuote is updated daily, and historical prices and volumes are available for most stocks back to Jan. 1, 1974. Dividend history and dates are available to Jan. 1, 1968.

Specific information available thru MicroQuote includes current and historical prices (high, low and closing), volumes, dividends and descriptive data such as earnings per share, ratings, shares outstanding, etc.

Information on bonds includes yields, maturity dates and Moody's ratings. Options information includes exercise prices, expiration dates and underlying stock prices.

MicroQuote allows a user to search for securities by using CUSIP (Committee on Uniform Security Identification) numbers, "ticker" symbols or other identifications, such as first or key letters of an issuer's name.

MicroQuote also searches for information between specific starting and ending dates and will organize information based on a daily, weekly or monthly time period.

The costs to use the MicroQuote database include "connect time" charges (the amount of time you are using the MicroNET service at \$5 per hour), a per-access fee of \$1 for each use of the MicroQuote system and transaction fees based on the program utilized and the amount of information requested.

For example, lists of issues cost 25 cents for increments of 25. Daily, weekly and monthly price and dividend sets cost 5, 10 and 25 cents respectively for each set (a set includes the date, volume, high/ask, low/bid and close). Examining an issue

The MicroQuote system is self-documenting through the use of special assistance commands. Also, the user may get brief instructions by entering a "?" at the prompt point.

When you have completed your session and wish to use other MicroNET programs a "carriage return" at the "PROGRAM" prompt will allow you to log into MicroNET. Enter your MicroNET User ID number as usual (without the MicroQuote

code) when you are prompted for it, and you will be connected to the regular MicroNET system.

A "carriage return" at the "PROGRAM" prompt also offers the choice to disconnect completely or to restart MicroQuote.

MicroNET Dealer/Distributorship Program
12/26/79

MicroNET has expanded and enhanced its Dealer/Distributorship program. For complete details, contact Mike Ward via FEEDBK.

Visit the MicroNET Line Printer Art Gallery
12/12/79

Take the time to browse through the MicroNET Line Printer Art Gallery. This unusual art gallery contains a true connoisseur's selection of computer graphics collectibles, featuring works by the old masters as well many contemporary subjects.

Useful Information About MicroNET
11/02/79

This is a service which will furnish information on questions most frequently asked by MicroNET users. Such as:

- What are your current rates?
- How do I access TYPNET?
- How can I get a list of the MicroNET telephone numbers?

and many more.

So if there's something you want to know about MicroNET you'll probably find it here. To use the service, enter:
TYP SYS:INFO.NET

If you don't find your answer, ask the Wizard of 10 via FEEDBK. It tells you how in INFO.NET.

Transfer Data Via MicroNET
11/03/79

MicroNET makes it possible for you to transfer programs and text files to other MicroNET users. For more information on this feature enter:
TYP SYS:TRANS.FER

Ask Aunt Nettie
10/26/79

Aunt Nettie answers questions on life, love, trivia, etc. A new Aunt Nettie column appears each Friday; to read, enter: R NETTIE

Career Opportunities with CompuServe
12/12/79

TERMINAL EMULATOR SAMPLE DATA

PURPOSE

The Terminal Emulator I Command Module has the capability to store received data on a mass storage device for later retrieval. TE1-DATA is a file of such data from a Micronet session. Use this file to show the power of the Home Computer to emulate an intelligent terminal.

USE

- STEP 1: Load the program diskette into Disk Drive 1.
- STEP 2: Insert the TE1 Command Module into the Home Computer.
- STEP 3: Select "Terminal Emulator" on the Main Selection Screen. The TE1 Title Screen now appears.
- STEP 4: Press any key and the Option Selection Screen appears.
- STEP 5: Press 1 to change device.
- STEP 6: Press 4 to select DSK1 (where the data is stored).
- STEP 7: Type: TE1-DATA and press ENTER.
- STEP 8: Check the screen and if OK, press ENTER. The computer immediately activates the disk and loads the sample data. This takes about two minutes.
- STEP 9: When the data is loaded, the screen blanks and a solid block cursor appears in the upper left corner of the screen. While holding down the SHIFT key, alternately press V (PROC'D) and the up arrow (UP) to scroll one page. Repeat this action to see the remainder of the data.
- STEP 10: Press SHIFT-Q when done to return to the Main Title Screen.