

03249

PROGRAM SUBMITTAL

☒ New Program☐ Revision to Program

Model No.

☐ 67☐ 97☒ 41

Program Title

Telephone Directory

No. Lines 76

Bytes

171

Category No. P500
(Primary)

Primary

Category Name

Special Information Applications

Abstract-75 Word Maximum PHONE is a telephone directory program. Phone numbers may be quickly retrieved by indexing on the first few letters of the first or last name, or all names and phone numbers can be reviewed. The names and phone numbers are stored in extended memory.

Necessary Accessories:

Extended Functions/Memory Module

Name

Gary Goodman

Company

(If Applicable)

Address

Box 259N Route 4

City

Fredericksburg

State/Province

Virginia

Postal Code

22405

Phone Number (703)

775-3260

Country

U.S.A.

Hewlett Packard Dealer

Educalc

Acceptance Choice:

☐ FOUR \$6.00 PROGRAMS☒ ONE POINT CERTIFICATE

Please use the checklist below to insure submittal of all proper program documents

☒ SIGNED PROGRAM
SUBMITTAL PAGE☒ Program Description II☒ Program Listing(s)☒ Registers, Status...☒ Program Description I☒ User Instructions☒ MASS STORAGE
MEDIA mag. card☐ Keyboard, Card Labeling
(optional)

ACKNOWLEDGMENT AND AGREEMENT

To the best of my knowledge, I have the right to contribute this program material without breaching any obligation concerning nondisclosure of proprietary or confidential information of other persons or organizations. I am contributing this program material on a nonconfidential nonobligatory basis to Hewlett-Packard Company ("HP") for inclusion in its program library, and I agree that HP may use, duplicate, modify, publish, and sell the program material, and authorize others to do so without obligation or liability of any kind. HP may publish my name and address, as the contributor, to facilitate user inquiries pertaining to this program material.

Signature

Gary Goodman

Date

HP USE ONLY

No.
Pages:

7

Mag Cards
Cassette:

Price:

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(If Applicable)
Address Box 259N Route 4

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Signature

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HP USE ONLY

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Program Title: Telephone Directory

Contributor's Name: Gary Goodman

Address: Box 259N Route 4

City: Fredericksburg

State: Virginia

Zip Code: 22405

Program Description:

PHONE is a telephone directory program. Phone numbers may be quickly retrieved by indexing on the first few letters of the first or last name, or all names and phone numbers can be reviewed.

The program uses an ASCII file named PHONE, in extended memory to store the names and telephone numbers. You must create this file before first using the PHONE program.

When the program is run, you will be prompted for NAME?. To find a person's phone number enter the first few letters of the first name, or a blank followed by the first few letters of the last name, or you may just press [R/S]. If you make an entry, the computer will search for a name starting with the given letters, and if it finds a match, the name will be displayed for about a second, then the phone number will be displayed. If the directory contains a number of entries beginning with the same given characters, you may press [R/S] to find the next such entry. If no entry is found, the computer will prompt again for NAME?. If you make no entry but just presses [R/S] in response to the NAME? prompt, the first name and phone number in the file will be displayed. Pressing [R/S] again will display the next entry.

To make a new entry in the phone directory, make sure the calculator is not in alpha mode and that user mode is set on. Press [A]. You will be prompted by ADD NAME?. Enter the new name, then press [R/S], and you will be prompted for the phone number. Note, you are in alpha mode during this entry so all numbers must be entered as characters, i.e., the Shift key must be pressed before each digit. After entering the phone number, press [R/S] to complete the entry.

To delete a name and phone number, press [E] when the phone number is displayed.

Necessary Accesories: Extended Functions/Memory Module

Operating Limits and Warnings:

Sample Problem

- a. Create a phone directory and add the following entries.
 BILL SMITH 775-3210
 JOYCE 371-8316X211
 BILL JOHNSON 415-962-2134
 RALPH 421-7603
- b. Get Ralph's number.
 Get Smith's number.
 Get Bill Johnson's number.
- c. Delete Joyce's number.

SOLUTION:

Before running the PHONE program, you must manually create the PHONE file. A file size of 35 registers will be enough for about 10 entries. Use the following keystrokes.

[ALPHA] **PHONE** [ALPHA] 35 [XEQ] [ALPHA] **CRFLAS** [ALPHA]

| Display | Keystrokes (SIZE ≥ 003) | Comments |
|--------------------|---------------------------|----------------------------------|
| Part a. | | |
| | [USER] | |
| | [XEQ] "PHONE" | Initializes PHONE |
| NAME? | | Prompt for name to retrieve |
| | [ALPHA] [A] | Take out of alpha mode; add name |
| ADD NAME? | BILL SMITH [R/S] | Add Bill Smith to the directory |
| PHONE NO.? | 775-3210 [R/S] | Enter Bill's phone number |
| BILL SMITH (pause) | | Name is momentarily displayed, |
| 775-3210 | | then phone number is displayed |
| | [A] | Add next name |
| ADD NAME? | JOYCE [R/S] | Enter name for next entry |
| PHONE NO.? | 371-8316X211 [R/S] | Enter phone number for entry |
| JOYCE (pause) | | Name is momentarily displayed, |
| 371-8316X211 | | then phone number is displayed |
| . | [A] | Repeat for Bill Johnson and |
| . | | for Ralph |
| . | | |
| RALPH (pause) | | Name is momentarily displayed, |
| 421-7603 | | then phone number is displayed |

| Display | Keystrokes | Comments |
|----------------------|--------------------|----------------------------------|
| Part b. | | |
| | [XEQ] "PHONE" | Initializes PHONE |
| NAME? | RALPH [R/S] | Get Ralph's phone number |
| RALPH (pause) | | Review name retrieved |
| 421-7603 | | Ralph's phone number |
| | [XEQ] "PHONE" | Initializes PHONE |
| NAME? | _SM [R/S] | _(space): search on last name |
| BILL SMITH (pause) | | Review name retrieved |
| 775-3210 | | Smith's phone number |
| | [XEQ] "PHONE" | Initializes PHONE |
| NAME? | BILL [R/S] | Bill Johnson's first name |
| BILL SMITH (pause) | | Oops! wrong Bill |
| 775-3210 | [R/S] | Search for next Bill |
| BILL JOHNSON (pause) | | This is the right one |
| 415-962-2134 | | Bill Johnson's phone number |
| Part c. | | |
| | [XEQ] "PHONE" | Initializes PHONE |
| NAME? | JOYCE [R/S] | Enter name to delete |
| JOYCE (pause) | | Review name before deleting |
| 371-8316X211 | | Joyce's phone number |
| | [E] | Delete retrieved entry |
| DELETE: R/S | [R/S] | Verify by [R/S] within 10 sec. |
| DELETED | | Entry for Joyce has been deleted |

Error Messages

END OF FL while attempting to add another name
or
DELETED while attempting to add a phone number:

means there is no more room in the PHONE file. An incomplete entry is deleted. To add another entry, you may delete an unused name and number and try again, or you may delete the file and then recreate it using a larger file size.

USER INSTRUCTIONS

| | | | | SIZE: (HP-41C) 003 |
|------|---|------------------|------------------------|-------------------------------|
| STEP | INSTRUCTIONS | INPUT | FUNCTION | DISPLAY |
| 1 | Load Program "PHONE" | | [GTO].. | PACKING |
| 2 | Create the PHONE file. This step must be done only once unless the file has been purged from extended memory. Enter the file name "PHONE" in the alpha-register. Enter the file size in the x-register. | "PHONE" n | [XEQ] "CRFLAS" | n |
| 3 | Execute the program. | | [XEQ] "PHONE" | NAME? |
| 4 | To add a name and phone number to the directory, continue at Step 5. To retrieve a name and number, skip to Step 8. To review all entries, skip to Step 11. To delete an entry, skip to Step 12. | | | |
| 5 | Add a name and phone number: Make sure HP-41 is in USER mode. Take out of ALPHA mode and press A. | | [ALPHA] [A] | ADD NAME? |
| 6 | Enter the name to be added | "name" | [R/S] | PHONE NO.? |
| 7 | Enter the phone number for "name" | "phone no!" | [R/S] | "name" then "phone number" |

USER INSTRUCTIONS

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| | | | | SIZE: (HP-41C) |
|------|---|--------|----------|-------------------------------|
| STEP | INSTRUCTIONS | INPUT | FUNCTION | DISPLAY |
| 8 | Retrieve a name and number: Enter the first few letters of the first name, or enter a space followed by the first few letters of the last name. | "name" | [R/S] | "name" then "phone number" |
| 9 | If there is more than one name which matches your entry, you can retrieve the next match by pressing: Repeat this step until the desired match is found. | | [R/S] | "name" then "phone number" |
| 10 | When the entire file has been searched NAME? will be displayed. Return to Step 8. | | | |
| 11 | To review all entries: Repeat this step until the desired name is found or END OF FL is displayed. | | [R/S] | "name" then "phone number" |
| 12 | To delete an entry, first retrieve it as instructed in Steps 8 through 11. Make sure HP-41 is in USER mode. | | [E] | DELETE: [R/S] |
| 13 | You must press [R/S] within 10 seconds to verify the request to delete. Any other key will cancell the request. | | [R/S] | DELETED |

PROGRAM LISTING

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☐ 67 ☐ 97 ☒ 41C

| STEP/ LINE | KEY ENTRY | KEY CODE (67/97 only) | COMMENTS | STEP/ LINE | KEY ENTRY | KEY CODE (67/97 only) | COMMENTS |
|---------------|-----------------|--------------------------|---|---------------|------------------|--------------------------|--|
| 01 | LBL "PHO NE" | | | 42 | LBL A | | Add New Name |
| 02 | LBL 01 | | Start | 43 | "ADD NAM E?" | | Prompt for new name to be added to directory. |
| 03 | "PHONE" | | | 44 | AON | | |
| 04 | 0 | | Initialize file. | 45 | PROMPT | | |
| 05 | SEEKPTA | | | 46 | APPREC | | |
| 06 | CF 23 | | | 47 | RCLPT | | |
| 07 | "NAME?" | | Prompt for name to search for in phone directory. | 48 | STO L | | |
| 08 | AON | | | 49 | "PHONE N 0.?" | | Prompt for the phone number. |
| 09 | PROMPT | | | 50 | PROMPT | | |
| 10 | AOFF | | | 51 | AOFF | | |
| 11 | ASTO 01 | | Store the name as entered. | 52 | SF 25 | | |
| 12 | ASHF | | | 53 | APPREC | | |
| 13 | ASTO 02 | | | 54 | FS?C 25 | | If not EOF, dis- play new entry; else delete name. |
| 14 | LBL 02 | | -Search File | 55 | GTO 03 | | |
| 15 | FC? 23 | | If no entry, dis- play 1st number. | 56 | GTO 05 | | |
| 16 | GTO 04 | | | 57 | LBL E | | Delete Name |
| 17 | CLA | | | 58 | RCLPT | | |
| 18 | ARCL 01 | | Recall the name as entered. | 59 | X=0? | | If no selection, go to Start. |
| 19 | ARCL 02 | | | 60 | GTO 01 | | |
| 20 | POSFL | | Search for name. | 61 | "DELETE: R/S" | | |
| 21 | X<0? | | If not found, return to Start. | 62 | AVIEW | | |
| 22 | GTO 01 | | | 63 | INT | | Prompt to confirm delete request. |
| 23 | FRC | | | 64 | 1 | | |
| 24 | X=0? | | If found in 1st col., reset ptr. | 65 | - | | |
| 25 | GTO 03 | | Else check to see if name begins with a space. | 66 | SEEKPT | | |
| 26 | GETREC | | | 67 | 84 | | |
| 27 | 32 | | | 68 | GETKEY | | |
| 28 | ATOX | | If not, then Search again. | 69 | X*Y? | | Ans. yes by [R/S] else go to Start. |
| 29 | X*Y? | | | 70 | GTO 01 | | |
| 30 | GTO 02 | | -Reset Pointer | 71 | DELREC | | |
| 31 | LBL 03 | | Reset record ptr. to column 0. | 72 | LBL 05 | | Delete name and phone number. |
| 32 | LASTX | | | 73 | DELREC | | |
| 33 | INT | | | 74 | "DELETED .. | | |
| 34 | SEEKPT | | | 75 | AVIEW | | |
| 35 | LBL 04 | | Display Phone No. | 76 | END | | |
| 36 | GETREC | | | | | | |
| 37 | AVIEW | | Flash name. | | | | |
| 38 | GETREC | | | | | | |
| 39 | PSE | | | | | | |
| 40 | PROMPT | | Display phone no. Search again. | | | | |
| 41 | GTO 02 | | | | | | |

STATUS

SIZE : 003

Program Size : 171 Bytes (25 Registers)

USER Mode : ON to add or delete entries

ASCII File Name : PHONE must be created manually by user.

ASCII File Size : Set by user. Approximately 3 1/2 registers will be needed
for each entry in the directory

DATA REGISTERS

01 First 6 letters of name to search for
02 Second 6 letters of name

FLAGS USED

23 Set : A name to search for has been entered.
Clear : Name has not been entered; review all entries.

25 Set : PHONE file is not full.
Clear : File is full; no room for phone number.