

HP 3000: A GUIDED TOUR

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# MODULE 2

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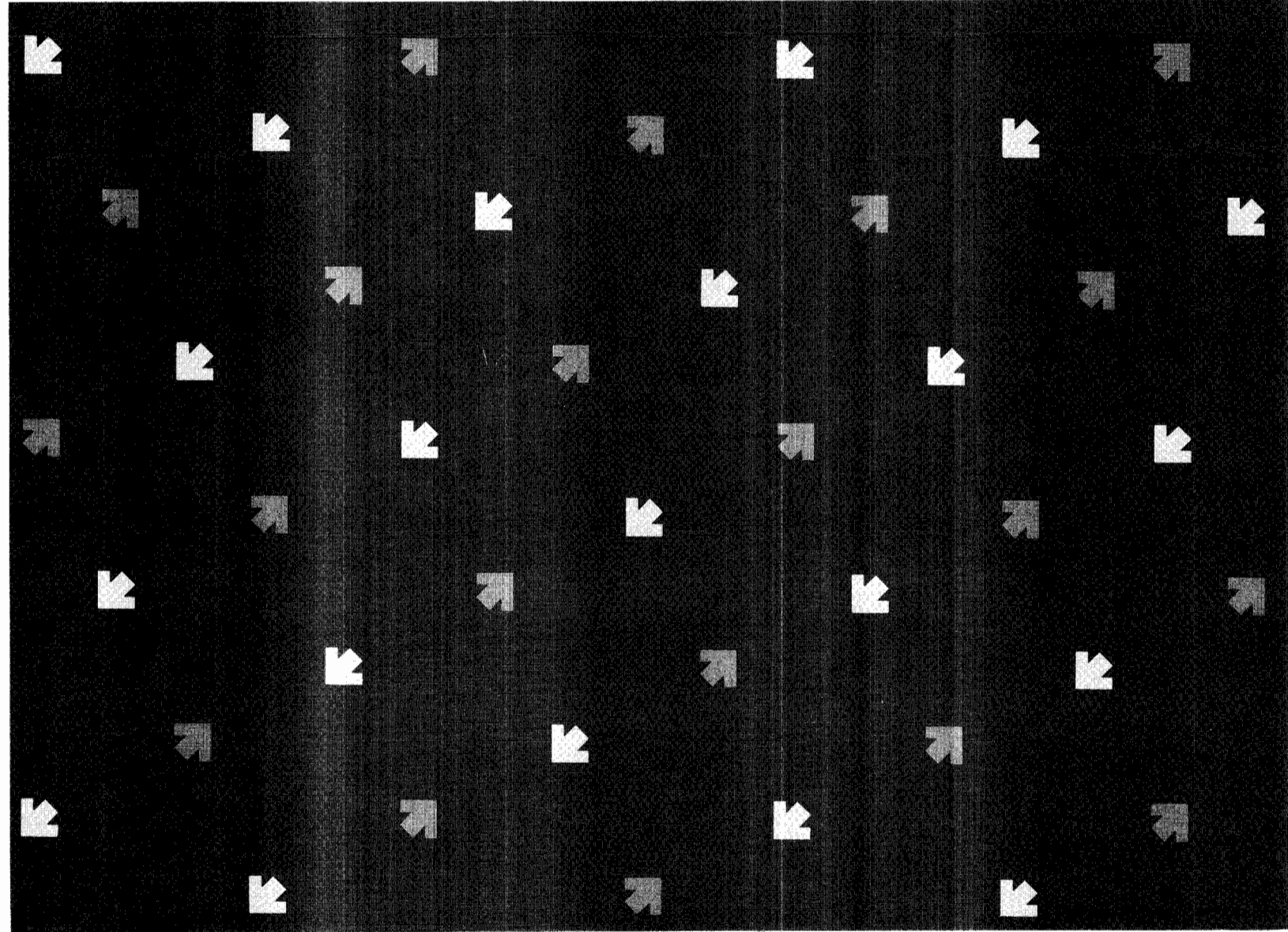
## The Thrill of Commands

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HP 3000: A GUIDED TOUR

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# MODULE 2

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# Before You Begin . . .

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Have you completed Module 1? If not, do so before you try this or any other module of the Guided Tour.

If you have completed Module 1, you're ready to continue with this module.

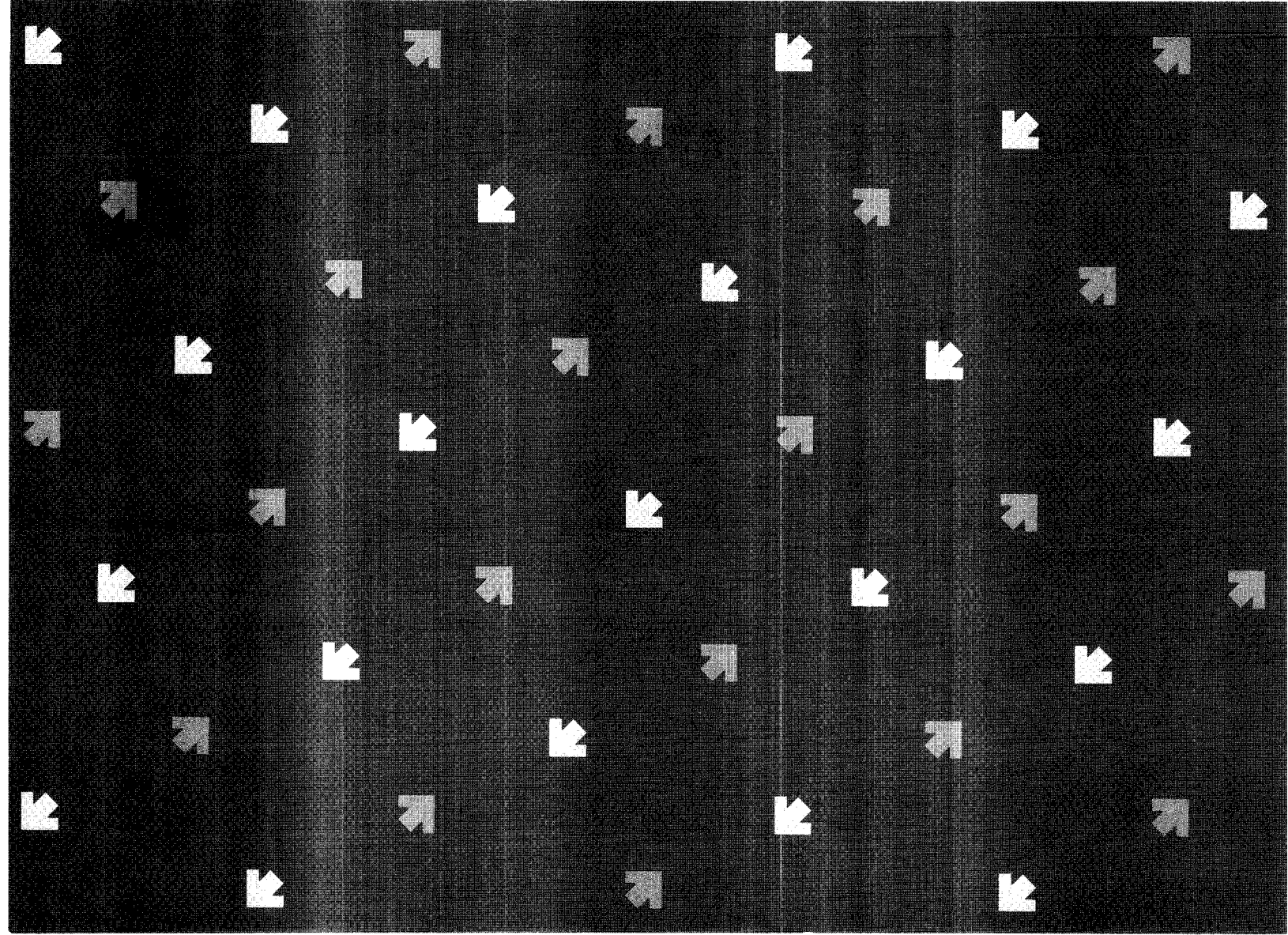
- Is your terminal turned ON?

Log on to the TOUR account by typing

```
:HELLO GUIDED.TOUR
```

Now turn the page and continue your tour.

**Note:** If the computer does not respond as the guidebook says it should, and as a result you cannot continue with the Tour, contact your HP 3000 System Manager.



# MODULE 2

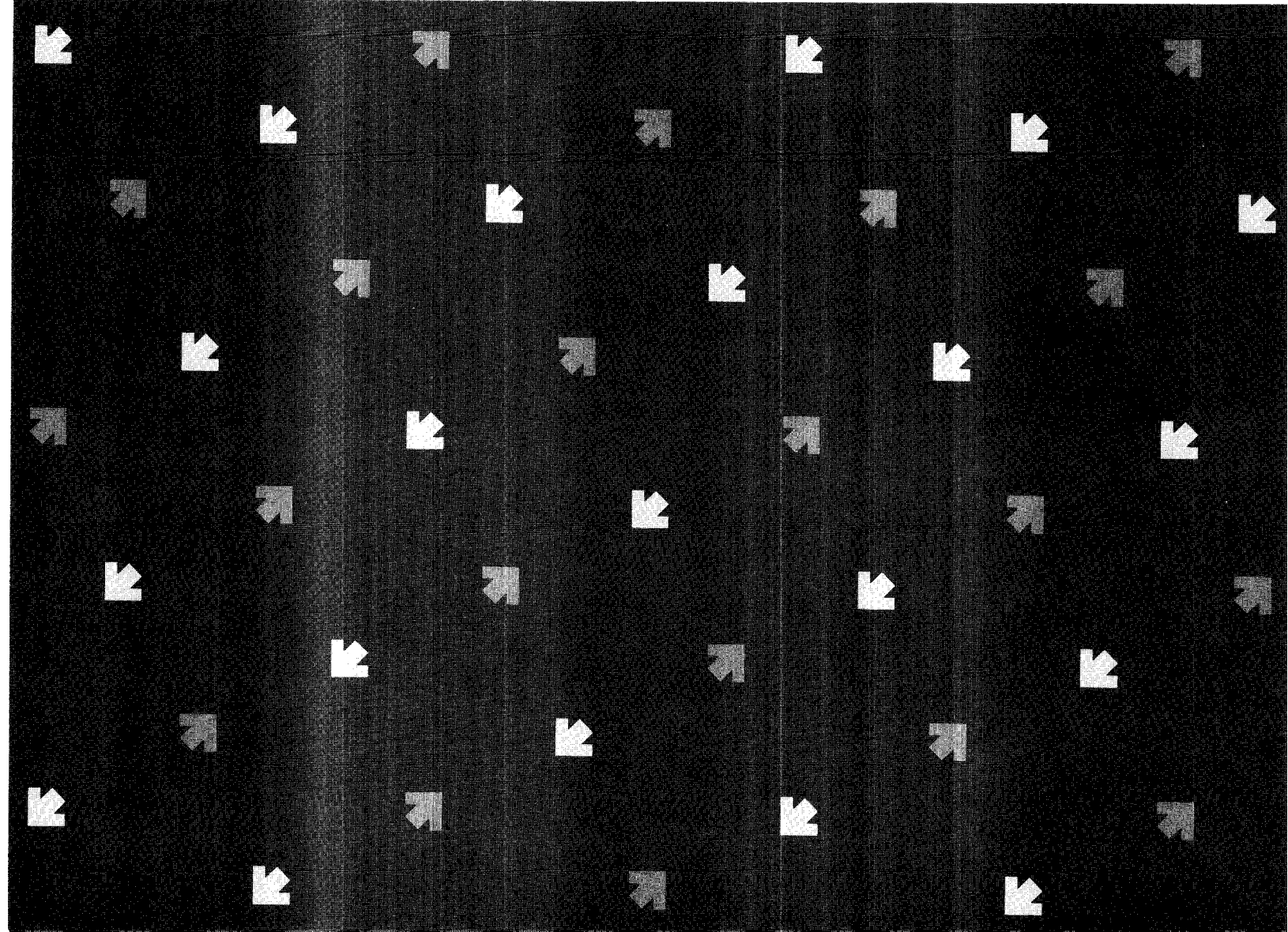
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# MODULE 2

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# The Thrill of Commands

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By now you have undoubtedly guessed that the relationship between you and the computer is not an equal one. The computer is in the subservient role, responding to whatever is typed at the terminal. You are the one who is in control, using the terminal to command the computer to perform specific actions.

Command has a special meaning to the HP 3000. A command is a word or group of words which tell the computer to do something. There are many, many commands available to you when you use the computer. You've already used several of them — :HELLO, :BYE, :DEFINE and :RUN. The :HELLO command tells the computer you want to

begin a session. The command :BYE is used to terminate a session. Each time you log on and log off you will use these commands.

The :RUN command tells the computer to execute a program. When you entered :RUN BEGIN you told the computer to execute a program named BEGIN. In response the computer displayed some information for you. The information displayed came from the BEGIN program. You will use the :RUN command to execute additional programs in other modules.



More information is displayed. This time the computer provided a list of the commands that are available to you when you hold a

Let's test this theory of operation for a few minutes and add a few more commands to our repertoire. Be sure to log on if you

## A Command Performance

### > SESSIONS

first.

The information displayed on the screen identifies the various topics that you can use with the :HELP command. The words along the last line of information provided are called keywords. There is one keyword for each :HELP topic. You can enter these keywords one at a time and see how the computer responds. Go ahead, try SESSIONS

Those are the commands you've learned to use so far. Notice that in each case, the computer concluded its response to the command by printing a colon, prompting you to type another command. That is the normal sequence of events when you use the HP 3000. You type a command, the computer acts upon the command and then prompts you for the next command. Sounds simple, and it is.

:HELP

One very useful command is called :HELP. It is used to ask the computer to give you information. To see how this command works, type

haven't already. You'll want to work through the exercises described here.

The command :DEFINE was created especially for use during the Guided Tour. It told the computer to execute a program which in turn provided definitions for the words you were prompted to type. We learn more about special commands like :DEFINE later in this module.

session. If you ask, the computer will explain each of these commands to you. Try one or two just to see how it works. For example, type

```
>HELLO
```

For the most part, the information displayed consists of syntax. Syntax is the format which must be used when you type a command. A command may consist of a single word or of several elements. Syntax is the order in which the elements must be sequenced when you type the command.

Whenever an element in the syntax description is enclosed in brackets, it means that element is optional or not required. During the Guided Tour, we will normally use the simplest form of each command and you will not have to worry about optional elements. But later, when you become more experienced with using the HP 3000, you will find that the :HELP command is a useful memory aid for command syntax.

## **When is a Command More Than a Command?**

### **When it's a subsystem.**

The :HELP command is really part of a set of programs known as the HELP subsystem. That's why the prompt issued by the computer is now a greater than sign (>) rather than the familiar colon. As long as the greater than sign (>) is displayed, you are interacting with the HELP subsystem and you can enter the name of any command or keyword that is of interest to you. The HELP subsystem will respond with information. When you are done with your fact finding, type

```
>EXIT
```

The prompt is now the good old MPE colon, and the computer is now ready to act upon other commands.

## A Short Cut

Another way to use the HELP facility is to type the word HELP followed by the name of the command you want information about. Let's do this to learn about a command named SHOWME. Type

```
:HELP SHOWME
```

In response, a brief description of the command is displayed along with the command's syntax (the word SHOWME). The last line of information (which starts with KEYWORDS) identifies specific kinds of information available about the command. The three keywords you may use are PARMS for parameters, OPERATION for how the command operates, and EXAMPLE. To ask for information using these keywords reenter the :HELP SHOWME command and this time add one of the keywords like EXAMPLE.

Type

```
:HELP SHOWME EXAMPLE
```

The example provided shows you exactly what happens when you use the command SHOWME. To prove it, type SHOWME and compare the results with what was displayed just above.

```
:SHOWME
```

All of the data displayed is about you. The first line contains your identity as a user. The #Snn is your session number. The rest of the line contains your user name — one of the words you entered when you logged on. The parenthetical remark simply means your session is in active rather than in break status.

The second line of information identifies the version of the Multiprogramming Executive (MPE) operating system with which you are interacting. The next few lines contain the current time, the time you logged on, and how much time you've used so far. CPU time refers to actual system usage, while connect time refers to elapsed time on the clock. The

\$STDIN and \$STDLIST devices are your terminal, which is identified by a two digit number.

The rest of the data displayed, if there is any, is a greeting or message supplied by the system manager for all system users.

The computer can explain all of this to you, too. All you have to do is ask by typing

```
:HELP SHOWME OPERATION
```

There, each of the items provided by the :SHOWME command is clearly defined by the computer. By now you are probably getting the idea. The HP 3000 is a self-documenting system. Instead of having a library of reference material at hand when you hold a session, you can use the computer's HELP subsystem to explain things to you. Armed with this assurance of assistance, then, let's forge on.

## Exercising Command

The following is a list of commands you will encounter and use as you work through the Guided Tour. You may experiment with them now if you'd like. Use the HELP subsystem to find out about the commands, then try using the commands in the exercises which follow. (**Hint:** If you get into any kind of difficulty, follow the procedures on pages 7 and 8 of Module 1.)

```
:ABORT  
:HELP  
:SHOWME  
:BYE  
:RESUME  
:SHOWTIME  
:HELLO  
:RUN
```



### Exercise 1:

Remember the program named BEGIN from Module 1? Type

```
:RUN BEGIN
```

again, only this time instead of pressing **RETURN** after the first screen full of information has been displayed, press the **BREAK** key. The **BREAK** key is used to interrupt the execution of the program and causes the colon prompt to be issued by the computer. The program is not terminated, it is just suspended. That means that you can tell the computer to continue executing the program by entering the **RESUME** command. Type **: RESUME**

The program has resumed execution precisely where it was interrupted. The message **READ PENDING** means that the program is waiting for you to press the **RETURN** key before presenting the second bit of information it contains. Go ahead and press **RETURN** and watch what happens.

See, the program is functioning normally, just as if it had never been interrupted. Now, without responding Y or N as requested on the screen, try exercise 2.

**Exercise 2:** Press the **BREAK** key again. The program is once again suspended. Rather than resuming the program at this point, however, tell the computer to terminate the program by typing **: ABORT**

The computer terminated the program and sent you a message to that effect. Notice that the message contains a parenthetically enclosed error number. That is because when a program is artificially terminated (as you just did with the **: ABORT** command), the computer technically interprets that an error has occurred. Don't worry about it. The point was to experience using the **: RESUME** and **: ABORT** commands.

### **Exercise 3:**

The `:SHOWTIME` command has only one reason to be — to make the HP 3000 behave like a clock. Type

```
:SHOWTIME
```

There, you see. You now know the precise day and time. Check your watch if you like. But from now on you don't have to; you know how to ask the computer to tell you the time.

You also know a good deal about using commands on an HP 3000 computer. From here on out, the Guided Tour will be expanding on this theme by introducing you to even more commands and showing you exactly how to use them to instruct the computer to perform specific tasks.

### **Command Encore**

The HP 3000 allows you to create your own commands. It even has a name for such commands; they are called UDCs for User-Defined Commands. UDCs are easy to create and they can be extremely useful especially when there is a certain task you ask the computer to perform frequently. The `:DEFINE` command we used on page 11 of Module 1 is a UDC created especially for the Guided Tour.

There are two MPE commands — `:SETCATALOG` and `:EDITOR` — you must use to create your own command. Module 5 contains a lengthy discussion of the `EDITOR` subsystem and if you experience any difficulty with the following exercise, you can stop and wait until you've completed Module 5 before creating your own command with the instructions provided on the following pages. The choice is yours.

### The General Idea

You are going to create a command which behaves exactly like the MPE command : SHOWTIME. That is a command which tells the computer to display the current date and time.

This UDC will be kept in a file called the UDCFILE. The command itself may have any name you wish to give it. Your own first name, for example, may be used as the command, but be sure that you don't use spaces in between the characters. In the explanation below, the name MARY is used for the command, but you may substitute any name you like, so long as you consistently use your name wherever the instructions show the name MARY.

### The Specifics

The whole process consists of the eight steps described below. Be sure to follow the steps in sequence. Good luck.

/ADD

In response, EDITOR finds the existing UDCFILE and makes it available to you. 4. Specify that you want to add to the file by typing

/T UDCFILE

For the next few steps you will be talking to EDITOR rather than to MPE, so the prompt will be a slash (/) rather than the familiar colon. 3. Tell EDITOR that you want to work with the UDCFILE by typing

:EDITOR

2. Tell the computer you wish to use the EDITOR by typing

:SETCATALOG

1. Tell the computer you intend to create a UDC file by typing

The numbers which appear on the screen at this point are known as line numbers, but you can think of them simply as prompts. The numbers on your screen may differ from the numbers shown in the example below, but don't worry about it. These numbers are provided automatically by the computer. The important part is the information you type. Type the following information one line at a time so that it looks just like this on your terminal screen

```
5 MARY
6 SHOWTIME
7 *****
```

The three lines you just entered were the UDC command. What they say in effect is, the new command MARY is to be acted upon just like the MPE command :SHOWTIME. The line of asterisks is simply a way of showing the end of the UDC.

5. Enter two slashes at this point to signify that you are finished defining your command, like so

```
8 //
```

6. Now that you have specified the command, tell the computer to keep it (so you can use it later) by typing

```
/KEEP UDCF ILE
```

7. The computer asks you to verify that this is the file you want to keep. Answer by typing YES, like so

```
PURGE OLD? YES
```

8. You're done with the task of creating the file so type

```
/EXIT
```



9. The last step is to reset the UDCFILE. You do this by typing

```
:SETCATALOG UDCFILE
```

And that's all there is to it.

The fun part is testing your new command. Go ahead, type MARY (or the name you used instead of MARY) and see what response you get.

Congratulations! You are now an experienced HP 3000 user. You have not only mastered entering commands, you have actually programmed the computer to follow your personal instructions.

The MPE Commands Reference Manual, part number 30000-90009, contains information about all the commands available to you as a bona fide HP 3000 user. Look through the manual when you've finished the tour and want to learn more about commands.

And speaking of learning more—there's a lot more information waiting for you in the Guided Tour. So, if you're ready, select another module and continue.