THE ATARI® 810™ DISK DRIVE

THE ATARI® 800™ COMPUTER SYSTEM

AN INTRODUCTION TO THE DISK OPERATING SYSTEM

ATARI®

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INTRODUCING DOS

WHY YOU NEED DOS

The Disk Operating System (DOS) is a program that allows the computer to work with your disk drive and enables you to store and retrieve information on diskettes. The information you save is stored on a diskette in a form called a "file." DOS (pronounced "doss") lets you assign a name to each file so you can call it up whenever you want to use the information.

DOS also offers you many useful ways to manipulate your files. For example, it will list all the files you have on the diskette any time you want. You can delete a particular file or erase the whole diskette, if you want to do a bit of "spring cleaning." You can duplicate a single file, a group of files or even the entire contents of the diskette.

You *must* load your computer with DOS before it can work with your disk drive. Fortunately, most prewritten diskette programs already have their own version of DOS on them, so you don't have to load it separately. But before you can save or load programs you write yourself, you first have to load DOS into the computer. The best way to do this is just to put DOS on every diskette that you use. It then automatically loads itself each time you use the diskette. We'll tell you how to do this later in this section.

WHAT YOU'LL LEARN FROM THIS BOOKLET

This is a brief introduction to DOS. After you read this booklet and follow the examples, you'll understand the important types of functions to use with the files you have stored. A number of less frequently used DOS functions aren't included here, nor are many fine points about using this very flexible disk operating system.

Once you know how to do the common disk drive operations, read the *ATARI Disk Operating System II Reference Manual.* The reference manual is a comprehensive and detailed guide to DOS; you'll find it contains a wealth of useful information. However, be aware that the reference manual isn't intended for beginners, so you may find it somewhat confusing if you just plunge right into it.
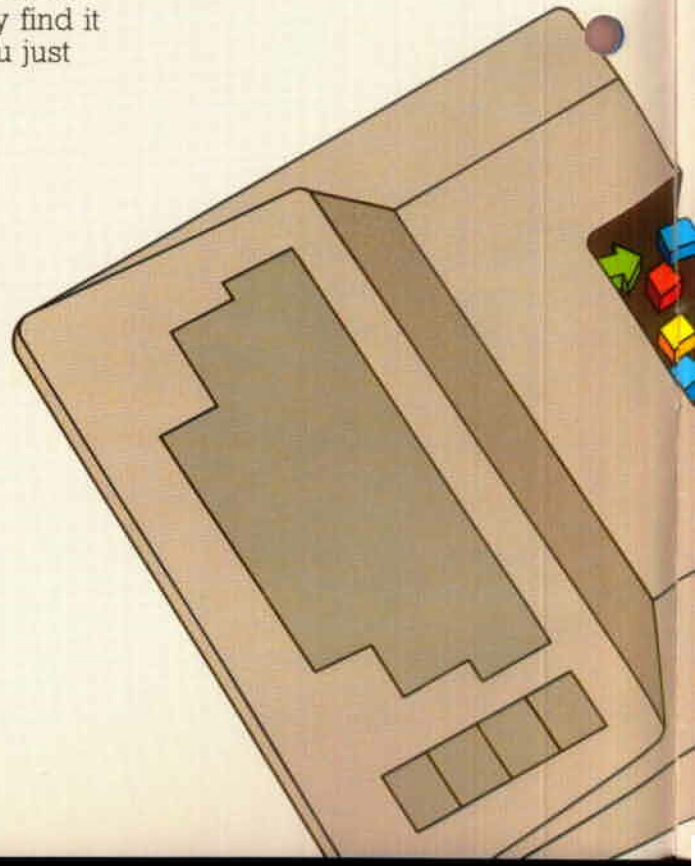
HOW PROGRAMS ARE STORED IN YOUR COMPUTER

Programs are stored in an area of the computer called *the memory*. When you type words on the keyboard, each keystroke is recorded in a small area of the memory. An unfortunate fact about computer memories is that their contents simply disappear when you turn the power off. So it's nice that you now have a disk drive that can permanently record what you type at the keyboard.

The process by which your programs and other information are saved and retrieved on a diskette is really quite simple. First you type the information in at the keyboard. When you save the information, it's sent through the data cord to the disk drive and recorded on the diskette as a file. The information typed remains in the computer memory until you turn off the power or write over it.

Loading programs from a diskette is basically the reverse of this process. A stream of information travels back through the data cord from the disk drive and is stored in the computer memory. If there is an existing program in the memory, you'll lose it because the new program is written over it.

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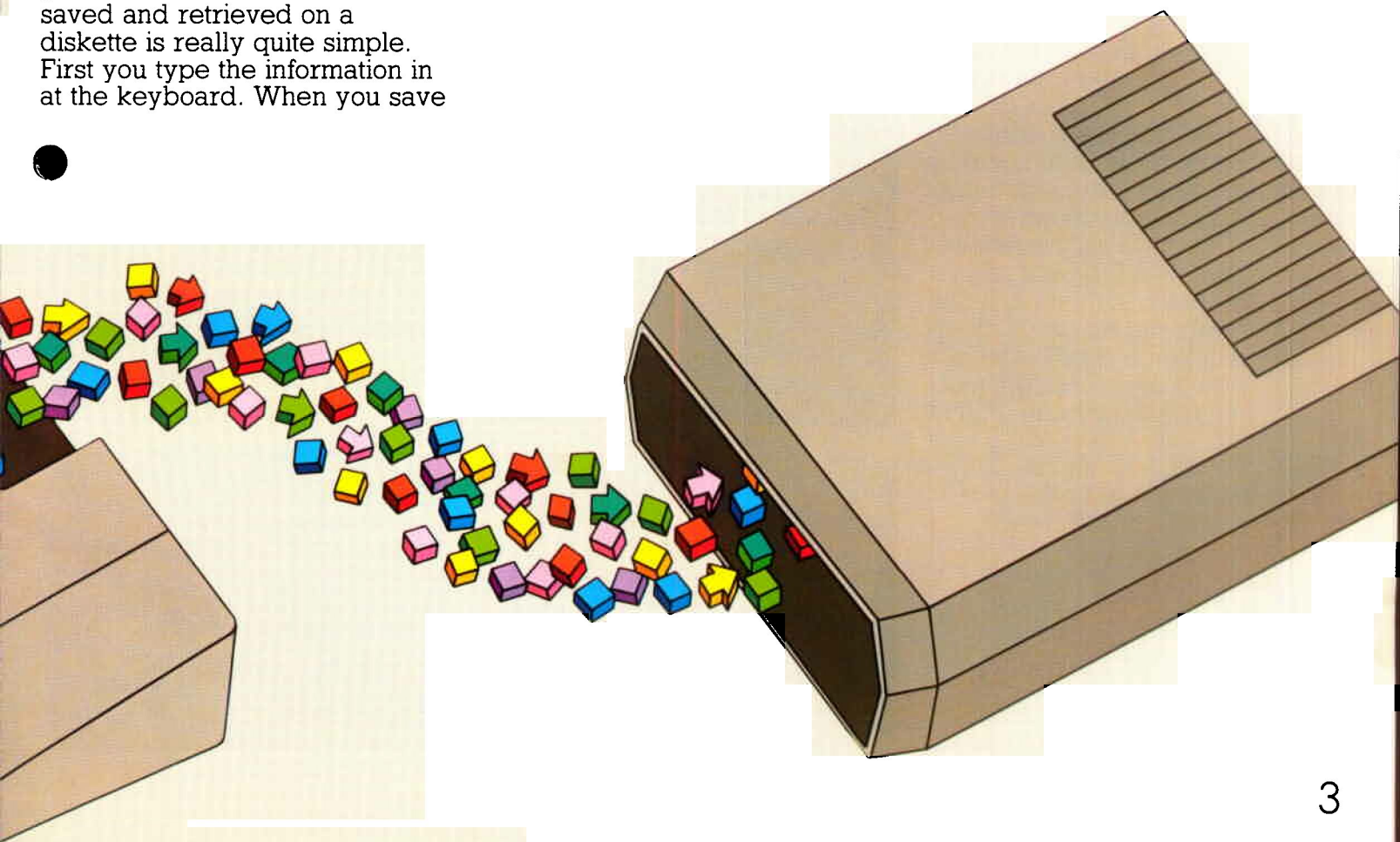
LOADING DOS

The process of loading DOS into the computer is called "booting the disk." If you try to use the disk drive without loading DOS, the computer reminds you of this by printing the message "BOOT ERROR" on the screen.

1 Turn off both the computer and the disk drive and remove any cartridge that may be in the computer.

2 Turn the disk drive on. When you first turn on the drive, it makes a whirring sound. After a moment the whirring stops and the BUSY light goes out, but the PWR ON light remains on.

3 Open the door on the disk drive by pressing the rectangular button on the front.

4 Remove the ATARI Master Diskette II from its protective sleeve and insert it into the disk drive with the label facing up. Then close the door.

5 Turn on the computer. Always turn the computer after you have turned on the disk drive and inserted the DOS diskette.

When you turn on the computer, DOS loads automatically. If you turn up the volume on your TV set while DOS is loading, you'll hear a series of beeps. This is perfectly normal and lets you know DOS is being loaded into the computer.

When DOS is finished loading, you'll see the DOS menu display

(below). The menu shows you the various options available with DOS and prompts you to pick one ("SELECT ITEM OR RETURN FOR MENU"). Note that if you have a BASIC cartridge in the computer, you'll see the READY prompt instead. To get the DOS menu, type **DOS** and press   .

We'll be using the menu in a moment, but first a note about which items are covered in this booklet. You'll find two types of menu options in the list: ones such as FORMAT DISKETTE that are used frequently by everybody and others such as CREATE MEM. SAV that are used primarily by programmers.

This booklet covers only the frequently used menu options. These items are highlighted in the screen on the left. You'll be able to do virtually all of the disk drive operations you'll need with these functions. After you have become familiar with these, you will probably want to read the reference manual, which covers both these and the others in depth.
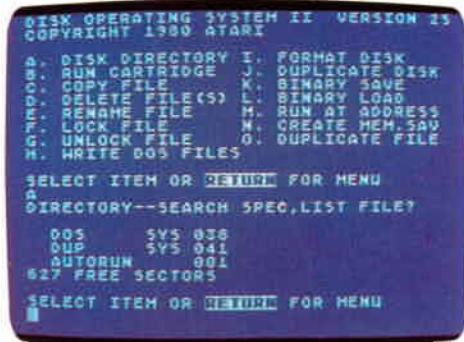
The next section of this guide contains detailed directions for using the menu options. But before getting into that, let's experiment a bit. First we'll take a look at the Disk Directory. Then you'll make a duplicate copy of the DOS file on the blank diskette. Finally, we'll practice saving and loading a very short BASIC program file.

LOOKING AT THE DIRECTORY

```
DISK OPERATING SYSTEM II   VERSION 2S
COPYRIGHT 1980 ATARI

A. DISK DIRECTORY  I. FORMAT DISK
B. RUN CARTRIDGE   J. DUPLICATE DISK
C. COPY FILE       K. BINARY SAVE
D. DELETE FILE(S)  L. BINARY LOAD
E. RENAME FILE     M. RUN AT ADDRESS
F. LOCK FILE       N. CREATE MEM.SAV
G. UNLOCK FILE     O. DUPLICATE FILE
H. WRITE DOS FILES

SELECT ITEM OR RETURN FOR MENU
A
DIRECTORY--SEARCH SPEC,LIST FILE?

    DOS      SYS 038
    DUP      SYS 041
    AUTORUN      001
627 FREE SECTORS

SELECT ITEM OR RETURN FOR MENU
```

Type **A** and press the ▒▒▒ key
twice. When you press ▒▒▒ the
second time, you'll see the above
screen display.

As you can see from the display,
selecting the directory option
lists the files stored on the
diskette. In the case of the
Master Diskette II, it's three files:
DOS.SYS, DUP.SYS, and
AUTORUN.SYS. The directory
also tells you how much diskette
space each file has used and
how many sectors are left. We'll
explain more about the directory
in the "Disk Directory" section.
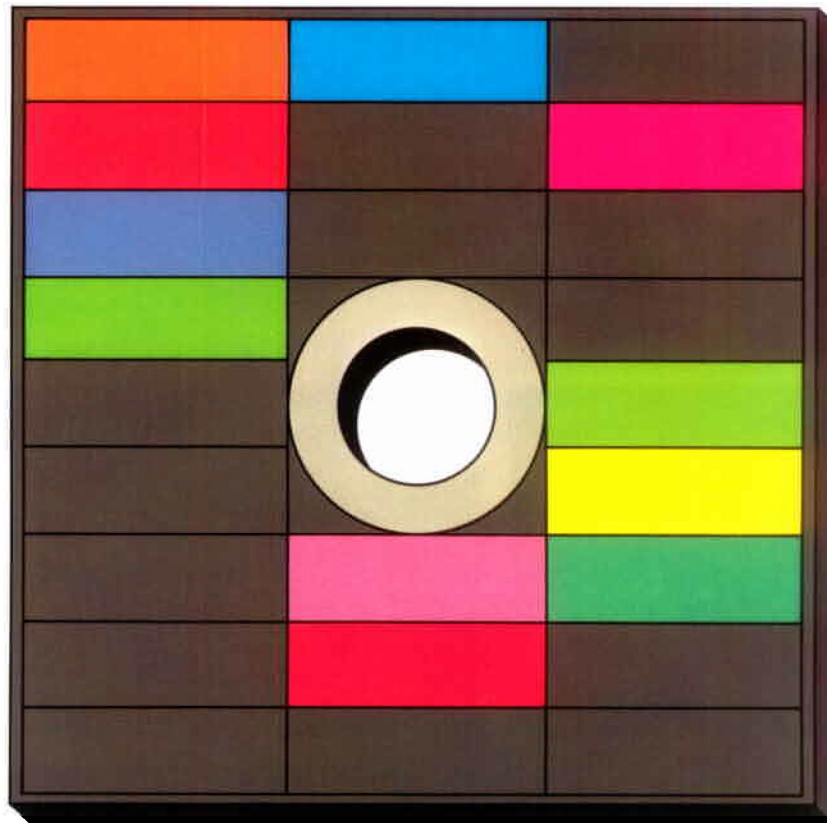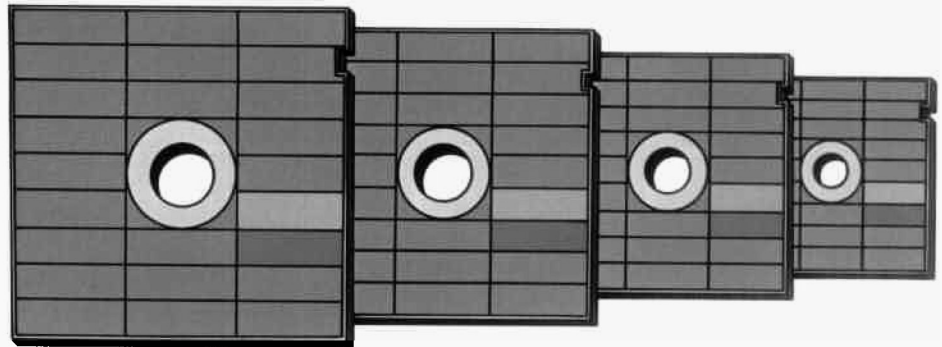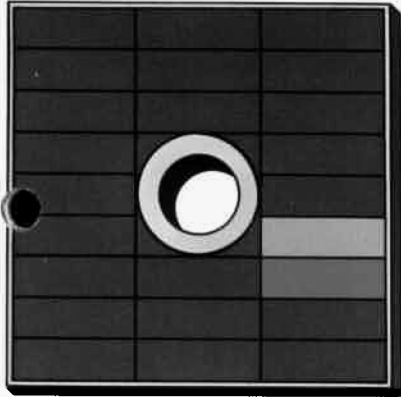
Unlike many diskette programs that are copy-proof, DOS is easily copied. In fact, there is even a special command in DOS that tells DOS to copy itself. Generally speaking, you should copy the DOS files onto new diskettes. This saves you the inconvenience of loading DOS from another diskette each time you need to use it. Also, a backup copy means you won't have to worry about anything happening to the original.

It's very easy to copy DOS. First, remove the Master Diskette II from the disk drive and insert the blank Formatted Diskette II into the disk drive. Then type in the following sequence. Notice that you must press the ⬛⬛⬛⬛⬛ key each time you type in a menu-selection letter or a response the computer asks for. (If you don't have a Formatted Diskette II, you'll need to format a new blank diskette. Follow the instructions in the section titled "Formatting A Diskette.")

```
COMPUTER:   SELECT ITEM OR RETURN FOR MENU
YOU TYPE:   H ▓▓▓▓
COMPUTER:   DRIVE TO WRITE DOS FILES TO?
YOU TYPE:   1 ▓▓▓▓
COMPUTER:   TYPE "Y" TO WRITE DOS FILES TO DRIVE 1.
YOU TYPE:   Y ▓▓▓▓
COMPUTER:   WRITING NEW DOS FILES
```

To write the new DOS files to the blank diskette, the computer simply took the contents of its memory and copied it onto the diskette. It also named the files in the process. To see what you did, check the directory.

```
COMPUTER:   SELECT ITEM OR RETURN FOR MENU
YOU TYPE:   A ▓▓▓▓
COMPUTER:   DIRECTORY--SEARCH SPEC,LIST FILE?
YOU TYPE:   ▓▓▓▓
COMPUTER:   DOS SYS 039
            DUP SYS 042
```

The process normally takes only a couple of minutes. If it's taking much longer, you may have a bad diskette. If you suspect this is the case, format a new blank diskette and then write the DOS files to the new diskette.

You may have noticed that the AUTORUN.SYS file was not copied. This is perfectly normal. Also, you didn't have to format the blank diskette because it already came formatted. In the future, you will have to format any new diskette before using it. It's easy to format a diskette, because this function also has its own DOS command. Formatting diskettes is explained later.

Now that you have copied the DOS files onto the practice diskette, you can put the Master Diskette away and use the practice diskette for the remainder of the exercises.

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SAVING AND LOADING A BASIC PROGRAM

It's also quite easy to save a file you have written onto the diskette and then load it back into the computer. In the following example, you'll write a very short program in BASIC and save it. Then you'll turn off the computer to erase the computer's memory and load the file from the diskette back to the computer memory.

But before you can write even a short program in BASIC, you need to insert the ATARI BASIC Computing Language cartridge in the computer. After you insert the cartridge and close the cartridge door, the computer turns itself back on and automatically loads the BASIC language program from the cartridge into its memory. It also loads DOS from the diskette into memory. The computer then tells you it's ready by displaying the READY prompt on the screen. Type the following lines:
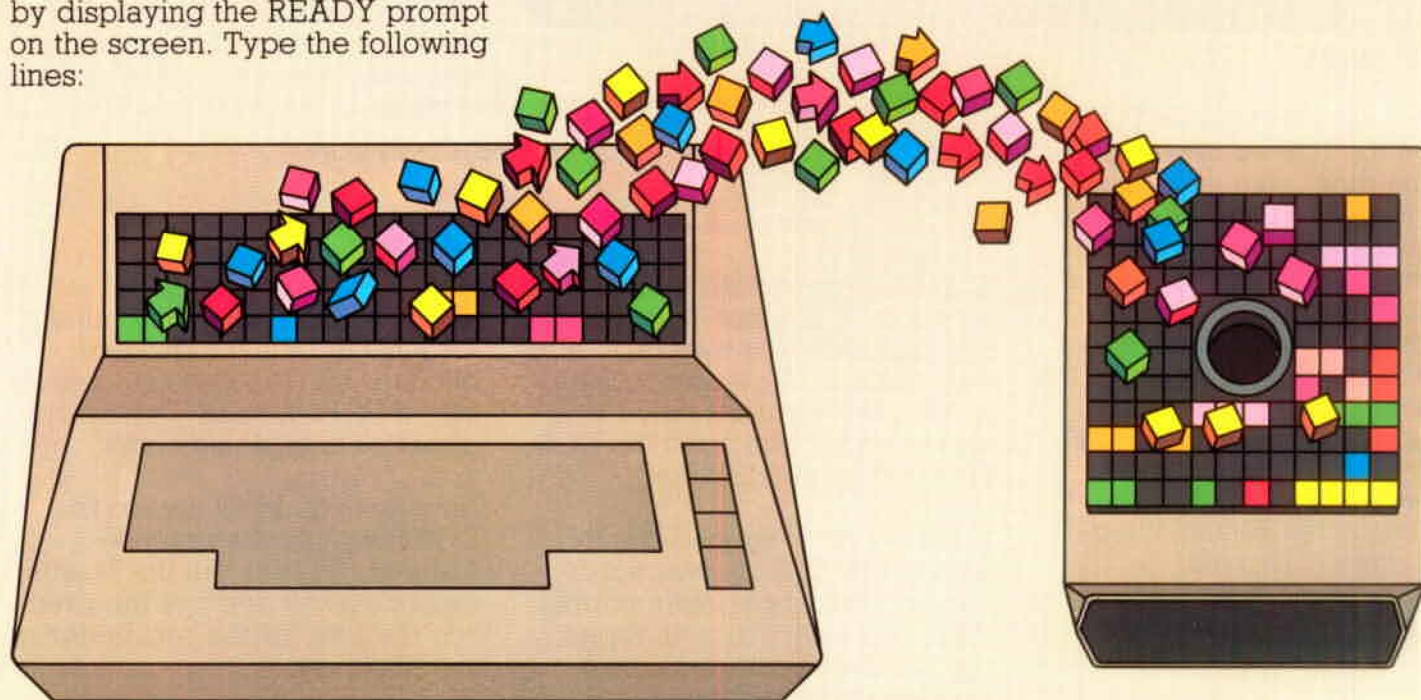
COMPUTER: **READY**
YOU TYPE: **10 PRINT "SAVING AND LOADING A FILE"** `RETURN`
20 GOTO 10 `RETURN`

You have now written a two-line program in BASIC that you want to save on the diskette. But before you can save a file, you need to decide on a name for it. Name this one "MYFILE" and save it by typing **SAVE "D:MYFILE"** and pressing the `RETURN` key. You must type the instruction exactly as shown, including the quotation marks.

When you press the `RETURN` key, the computer begins saving your program on the diskette under

the name MYFILE. The disk drive and the computer make some sounds associated with the saving process. Then the disk drive quiets down and the disk drive's BUSY light goes out, indicating that it's done saving the program.

To see if the file has really been saved, turn off both the computer and the disk drive. Now, turn on the disk drive and then the computer (always turn on the computer after the drive). The computer first loads itself automatically with DOS, then displays the READY prompt.

To retrieve your file, type **LOAD "D:MYFILE"** and press `RETURN`. The disk drive and computer make a few loading noises, then the computer again displays the READY prompt. Your program is now in the computer memory. To see it, type **LIST** and press `RETURN`. You should see:

```
10 PRINT "SAVING AND LOADING A F
ILE"
20 GO TO 10

READY
```

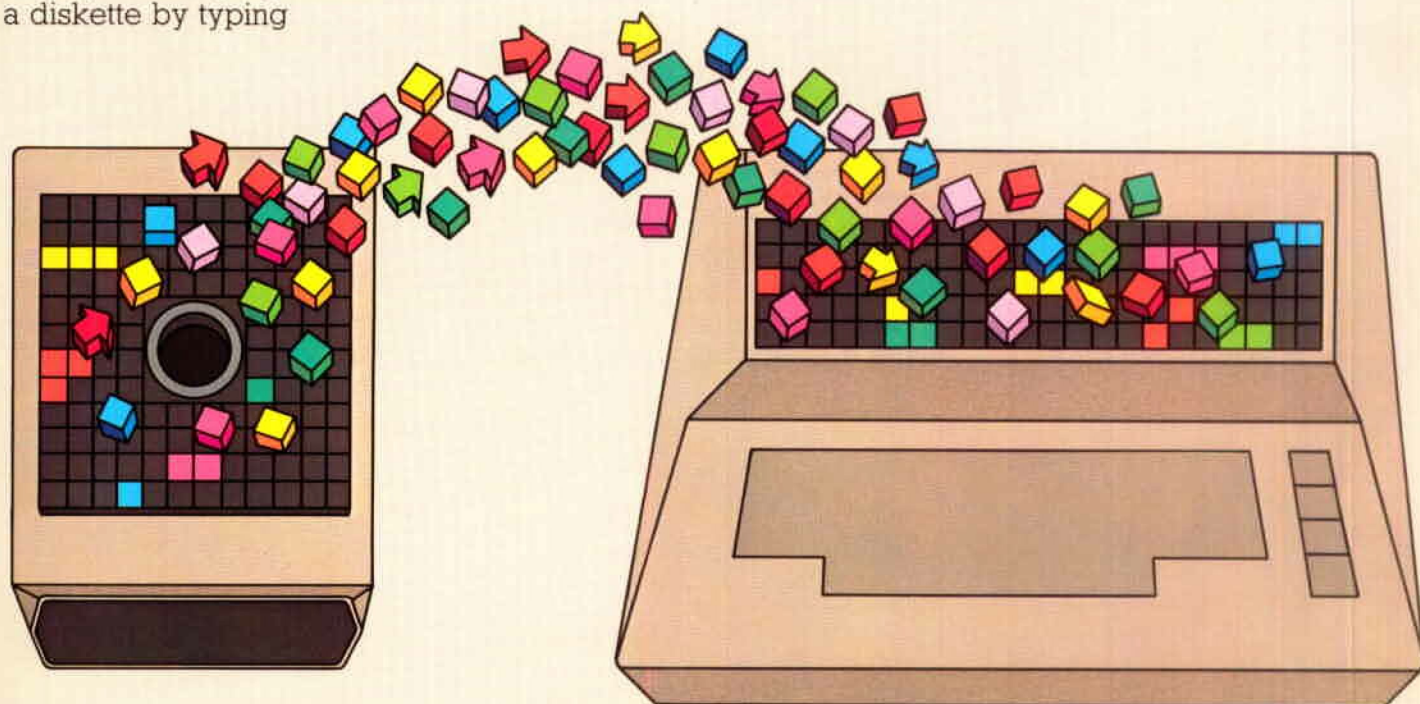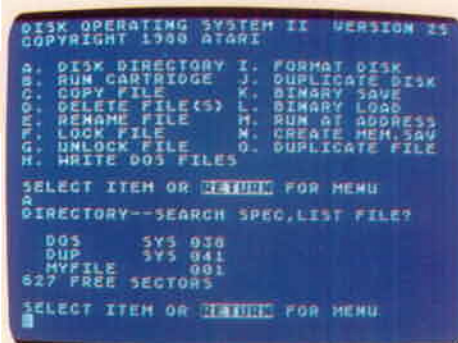Now type **RUN**, press `RETURN`, and watch what happens. (To stop the program, press the `BREAK` key.) Congratulations! You have just successfully written, saved, loaded, and run a BASIC program.

Whether it is two lines or two hundred, you can store and retrieve any BASIC program from a diskette by typing

SAVE "D:FILENAME" and **LOAD "D:FILENAME"** just as you did before. By the way, if you just want to run a program, you can save a step by typing **RUN "D:FILENAME"** to make the computer load and run the program in one step.
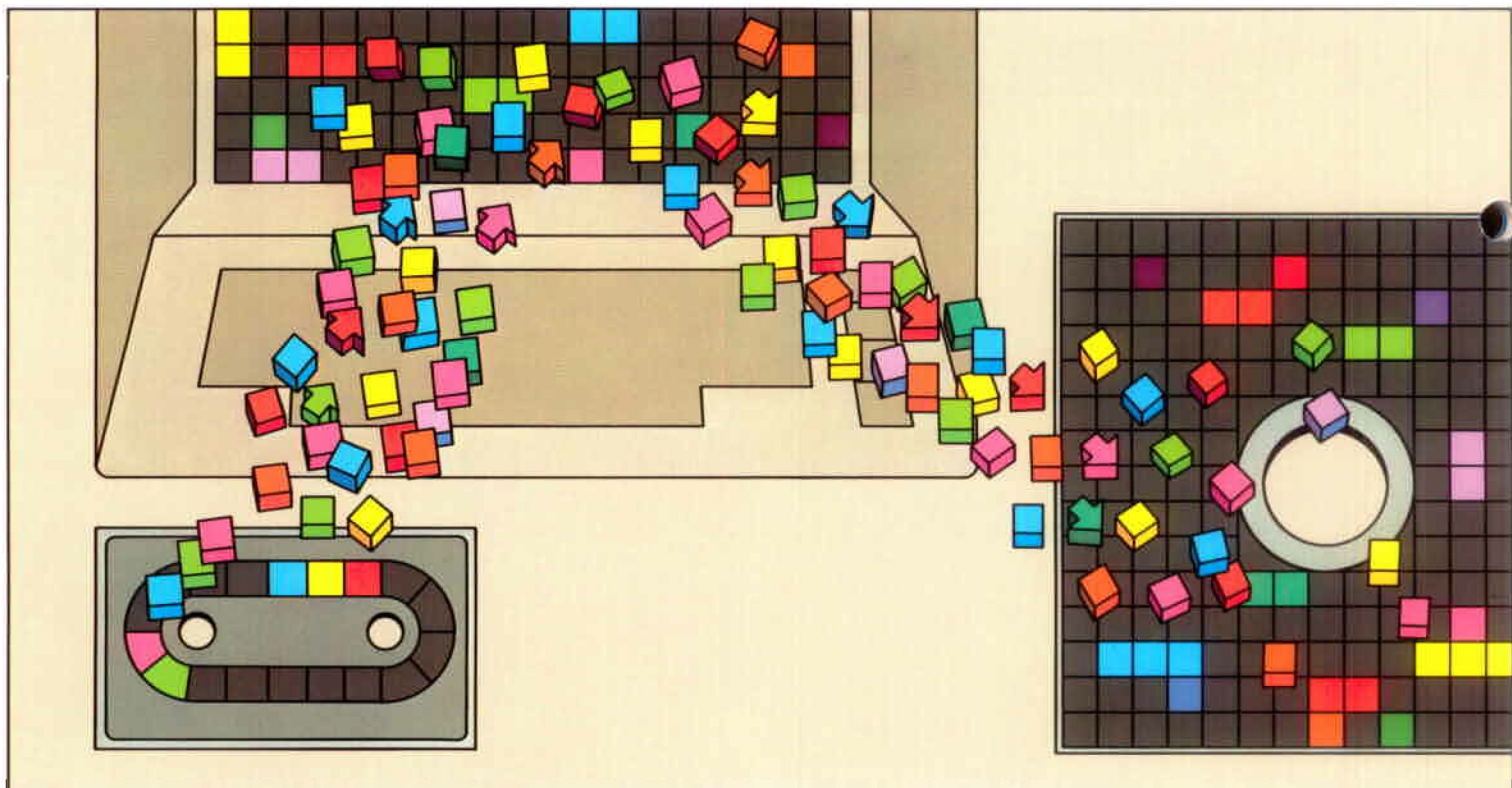
If you want to do a DOS operation now (looking at the directory, for example), type **DOS** and press `RETURN`. The part of DOS that contains the menu display and other functions is now loaded from the diskette and into the computer memory and the screen displays the DOS menu.

(When you first boot the diskette, just enough of DOS is automatically loaded to let you do rudimentary functions such as saving and loading files. This is done to save space in the computer memory so you have more room to use for your program.) To see your new filename in the directory, type **A** and press `RETURN` twice.

```
DISK OPERATING SYSTEM II   VERSION 2S
COPYRIGHT 1980 ATARI

A.  DISK DIRECTORY    I. FORMAT DISK
B.  RUN CARTRIDGE     J. DUPLICATE DISK
C.  COPY FILE         K. BINARY SAVE
D.  DELETE FILE(S)    L. BINARY LOAD
E.  RENAME FILE       M. RUN AT ADDRESS
F.  LOCK FILE         N. CREATE MEM.SAV
G.  UNLOCK FILE       O. DUPLICATE FILE
H.  WRITE DOS FILES

SELECT ITEM OR RETURN FOR MENU
A
DIRECTORY--SEARCH SPEC,LIST FILE?

    DOS       SYS 038
    DUP       SYS 041
    MYFILE        001
627 FREE SECTORS

SELECT ITEM OR RETURN FOR MENU
```

SAVING CASSETTE PROGRAMS

Do you or a friend have BASIC programs stored on cassette? If so, you can now transfer those programs onto a diskette. The process is the same as saving a program you've just written, except you first have to load it into the computer from the cassette.

To do this, follow the instructions for loading cassette programs found either with the program or with the **ATARI 410™ Program Recorder**. Then, run the program and, while it's running, press the **BREAK** key. Type **SAVE "D:FILENAME"** and the program you loaded from cassette into the computer memory is saved from the memory onto the diskette.

The next sections cover several more of the DOS menu options and add some detail to what you have already learned about the directory function. These sections are organized so you can use them as an abbreviated reference guide to the common DOS functions. They're not intended to replace the reference manual, but they do explain the common disk drive operations.

Just as you call a person by name, so must you call a file by its right name when you want to use it. If you call a file by a wrong name, just like a person, it won't answer. Instead, you'll see ERROR—170 on the screen, which means DOS can't find the file you called.

A few rules to remember when creating filenames are:

- Maximum length is eight characters.

- The only characters that can be used are the letters A through Z and the numbers 0 through 9.

- The first character must be a letter.

Filenames may also have *extenders*. An extender is a suffix added to the filename and is useful for categorizing types of files. An extender can be one to three characters. You can use any legal combination of letters and numbers. For example, you might want to end each file written in BASIC with the extender BAS or files created with the Music Composer™ cartridge with MUS to remind you to insert the correct cartridge when running those files.

To add an extender, just type the filename, a period, then the extender. For example, we could have named the practice file MYFILE.BAS.

The only other item you need to know about calling files is how to use a *filespec*.

A filespec is the filename plus its extender, if any, plus the *device code*. The device code for a computer with one disk drive is "D:". Thus, the full filespec for our practice file is D:MYFILE.BAS if you added an extender or D:MYFILE if you didn't.
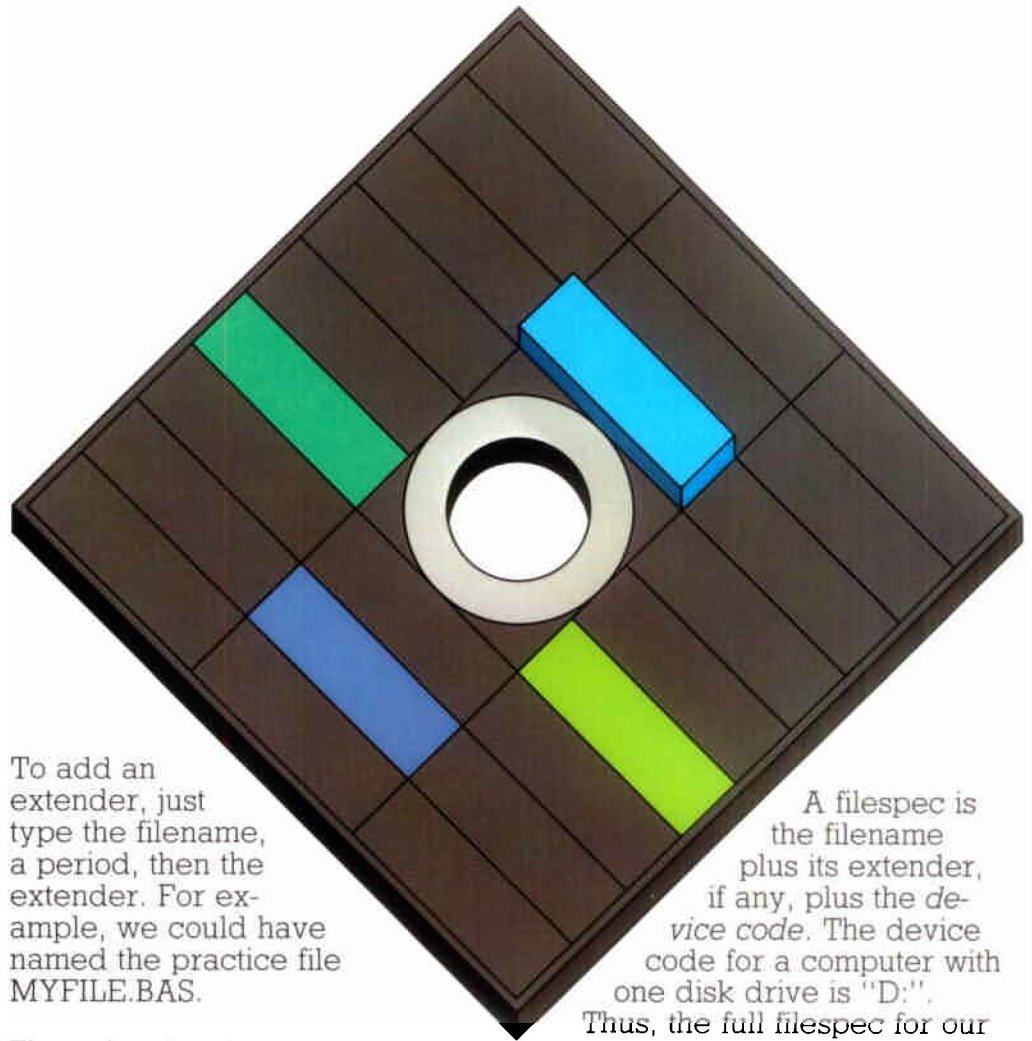
WILD CARDS

A wild card in the filename works just like a joker in a pack of cards. In a card game, a wild card can be substituted for any other card. The same is true for filenames. Wild cards are very useful for manipulating groups of files, as we shall see in a moment.

Two types of wild cards are allowed: an asterisk (*) can stand for any combination of letters and numbers; a question mark (?) stands for only one letter or number.

For example, let's say you had 20 BASIC files on a diskette that you wanted to duplicate for a friend. Instead of typing each filename separately and telling the computer to duplicate it, you could substitute the wild card expression D:*.BAS for all the files that end in BAS.

If you just want to substitute a single letter, use the question mark. For example, let's say you had a number of similarly named files such as FILE1.BAS, FILE2.BAS, FILE3.BAS, FILE4.BAS, etc. mixed in with a number of other filenames. You could use the wild card expression FILE?.BAS to duplicate that group of files which begins with "FILE" and ends with "BAS."

Wild cards can be used with several important DOS functions, such as the Disk Directory, the Delete File command, and the Duplicate File command. We'll do some exercises later that demonstrate the use of this timesaving technique.

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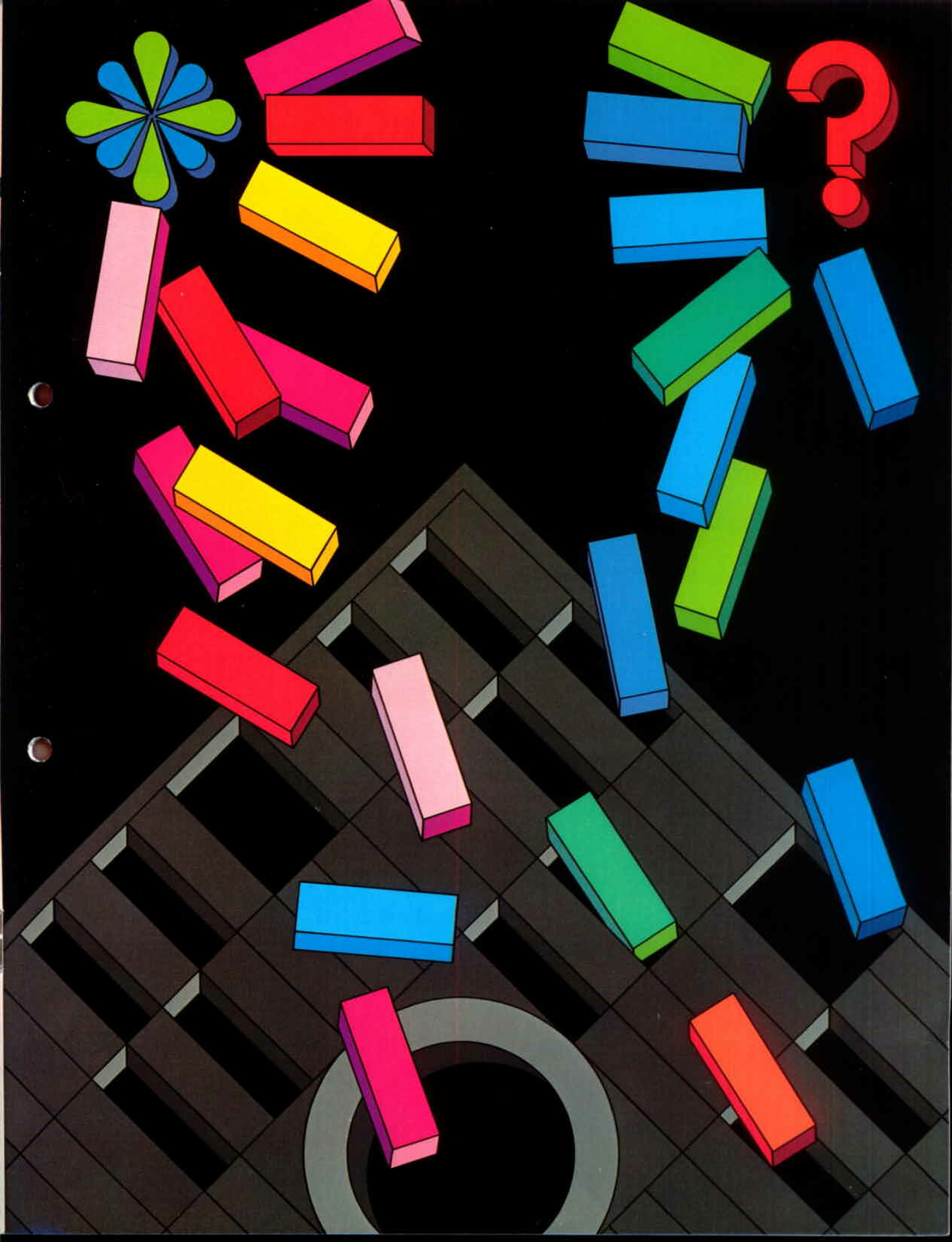
As you have already learned, the Disk Directory contains a list of all the files on a diskette plus the number of sectors allocated to each. Thus far we have used one type of command that lists all the files on the directory. But what if you had many small files on a diskette and didn't want to see the whole list each time you were looking for a subcategory?

In this case, you would use wild cards. Let's try an exercise that does this, but first, you'll need to have some new filenames with which to play. We'll enter four make-believe BASIC program files and four data files.

Make sure you still have your practice diskette in the disk drive. If the BASIC cartridge is still in the computer, turn the computer off then back on again. If you have removed the BASIC cartridge, insert it again. The DOS file on the practice diskette boots automatically when you close the cartridge door. When you see the READY prompt, enter the following filenames. Remember to press the RETURN key after each line.
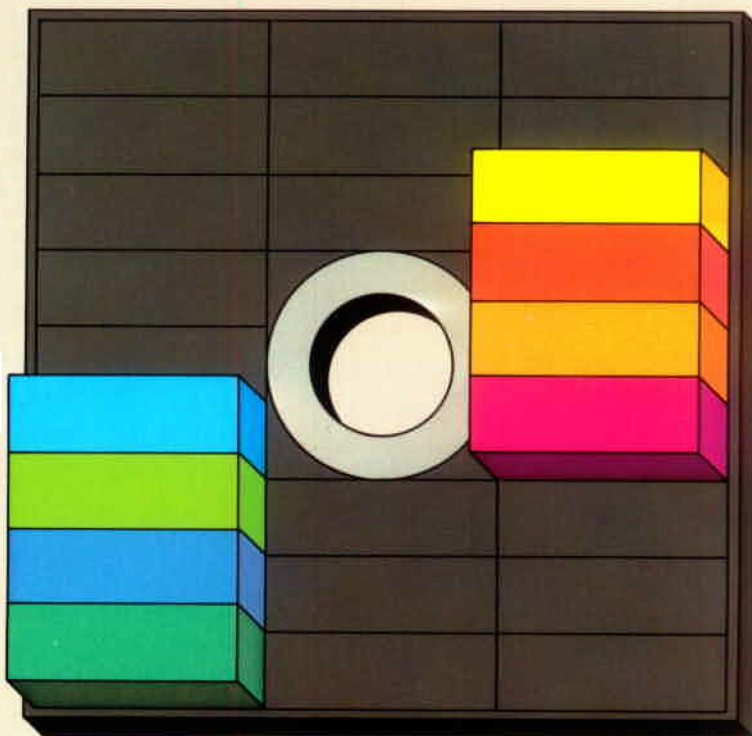
COMPUTER:	READY
YOU TYPE:	SAVE "D:FILE1.BAS" RETURN
COMPUTER:	READY
YOU TYPE:	SAVE "D:FILE2.BAS" RETURN
COMPUTER:	READY
YOU TYPE:	SAVE "D:FILE3.BAS" RETURN
COMPUTER:	READY
YOU TYPE:	SAVE "D:FILE4.BAS" RETURN
COMPUTER:	READY
YOU TYPE:	SAVE "D:NAME1.DAT" RETURN
COMPUTER:	READY
YOU TYPE:	SAVE "D:NAME2.DAT" RETURN
COMPUTER:	READY
YOU TYPE:	SAVE "D:NAME3.DAT" RETURN
COMPUTER:	READY
YOU TYPE:	SAVE "D:NAME4.DAT" RETURN
COMPUTER:	READY

Let's try some experiments with these filenames. First, bring up the DOS menu by typing **DOS** `RETURN`. Then look at the entire directory by typing **A** `RETURN` `RETURN`. You should see the display at the right.

Now that we have a number of filenames in the directory, we can play some tricks using wild cards. First, try listing all the BASIC program files (remember to press `RETURN`).

```
YOU TYPE:     A RETURN
COMPUTER:     DIRECTORY--SEARCH SPEC,LIST FILE?
YOU TYPE:     D:*.BAS
COMPUTER:     FILE1 BAS 001
              FILE2 BAS 001
              FILE3 BAS 001
              FILE4 BAS 001
```

As you can see, the computer listed only the files that ended in the extender BAS. A handy trick, isn't it? Now try using the single-letter wild card.

```
YOU TYPE:     A RETURN
COMPUTER:     DIRECTORY--SEARCH SPEC,LIST FILE?
YOU TYPE:     D:NAME?.DAT
COMPUTER:     NAME1 DAT 001
              NAME2 DAT 001
              NAME3 DAT 001
              NAME4 DAT 001
```

You also could have used D:NAME?.* instead of D:NAME?.DAT. If you again want to see all the files in the directory, try listing them using the expression D:*.* and see what happens.

```
E. RENAME FILE      M. RUN AT ADDRESS
F. LOCK FILE        N. CREATE MEM.SAV
G. UNLOCK FILE      O. DUPLICATE FILE
H. WRITE DOS FILES

SELECT ITEM OR RETURN FOR MENU
A
DIRECTORY--SEARCH SPEC,LIST FILE?

DOS       SYS 039
DUP       SYS 042
MYFILE        001
FILE1     BAS 001
FILE2     BAS 001
FILE3     BAS 001
FILE4     BAS 001
NAME1     DAT 001
NAME2     DAT 001
NAME3     DAT 001
NAME4     DAT 001
617 FREE SECTORS

SELECT ITEM OR RETURN FOR MENU
```

When you select the B menu option, DOS returns control of the computer to the inserted cartridge and the "title screen" or prompt message of that cartridge is displayed. Try the following example.

First, clear the screen of the old directory listing by pressing `RETURN`.

```
COMPUTER:   SELECT ITEM
            OR RETURN FOR MENU
YOU TYPE:   B RETURN
COMPUTER:   READY
```

To get back into DOS from BASIC, just type **DOS** and press `RETURN`. You'll hear the rest of DOS being loaded from the diskette into the computer and then the DOS menu appears on the screen.

FORMATTING
A DISKETTE

Any new diskette must be formatted before you can use it. The Format Diskette option can also be used to erase all the files on a diskette. The formatting process organizes the surface of the diskette into sectors and tracks so the information you store goes into a predetermined place where it can later be found.

You didn't need to format your practice disk before using it, because it came formatted. But when you buy new diskettes, you'll find that formatting is very simple.
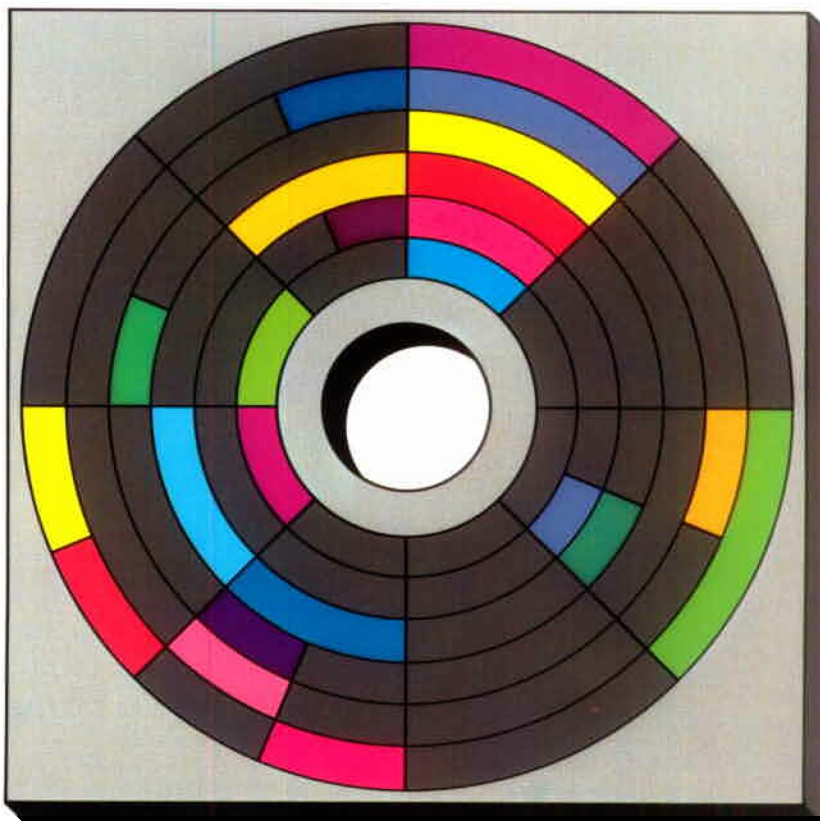

COMPUTER: **SELECT ITEM OR RETURN FOR MENU**
YOU TYPE: **I**
COMPUTER: **WHICH DRIVE TO FORMAT?**
YOU TYPE: **1**
COMPUTER: **TYPE "Y" TO FORMAT DISK 1**
YOU TYPE: **Y**

The disk drive whirs and clicks for about two minutes. You'll know the formatting process is completed when the screen displays "SELECT ITEM OR RETURN FOR MENU" again.

Occasionally a new diskette may have a bad sector and DOS is unable to format it. DOS tries to format the diskette several times (which may take up to 15 minutes), then gives up and prints the message ERROR—173. If this ever happens, return the diskette to the supplier.

16
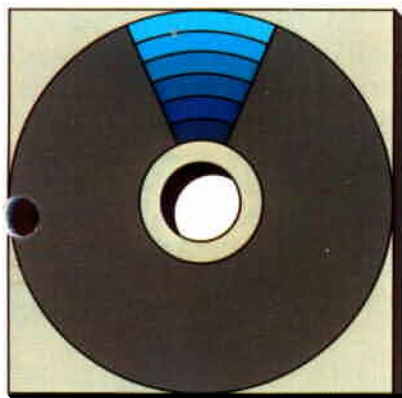
Generally, you should write a new set of DOS files to any new diskette you have formatted. This saves you the inconvenience of loading DOS separately when you need to perform a DOS function such as duplicating or deleting.

It does take some space to write DOS on a new diskette (81 sectors out of a total of 707). If you need all the space on the diskette, you may not want to write DOS to it. If you have already written the DOS files and later find you need more space, you can remove the DOS files using the Delete option.
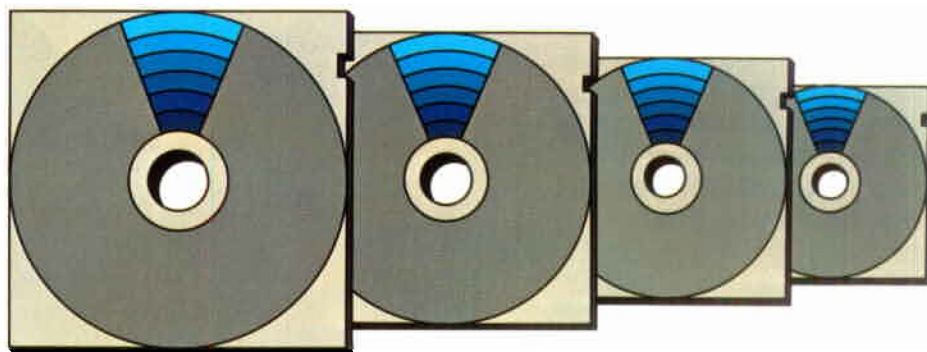
The computer prompts you for each response you need to make while writing new DOS files.

COMPUTER: **SELECT ITEM OR RETURN FOR MENU**
YOU TYPE: **H** **RETURN**
COMPUTER: **WHICH DRIVE TO WRITE DOS FILES TO?**
YOU TYPE: **1** **RETURN**
COMPUTER: **TYPE "Y" TO WRITE DOS TO DRIVE 1.**
YOU TYPE: **Y** **RETURN**
COMPUTER: **WRITING NEW DOS FILES**

COPYING FILES

There are two menu options used to make duplicate copies of a file: Copy File and Duplicate File. Use the Copy File option when you want to make a copy on the *same* diskette; use the Duplicate File option when you want the copy on a *different* diskette.

The computer won't allow you to have two files by the same name on the same diskette, so you have to change either the extender or the filename or both when copying to the same diskette. Wild cards cannot be used with this menu option unless you have two or more disk drives.

The following example makes an identical copy of MYFILE on the same diskette, except that it is renamed MYFILE1. If you want to copy more than one file, just repeat this process for all the files you want copied.

```
COMPUTER:   SELECT ITEM OR RETURN FOR MENU
YOU TYPE:   C
COMPUTER:   COPY--FROM, TO?
YOU TYPE:   D:MYFILE,D:MYFILE1
```

Now check the directory just to be sure that it worked. Type **A** and press the   key twice to see the new directory listing.

The Duplicate File option duplicates a file onto another diskette. To copy onto another diskette, you manually insert the source diskette (original), remove it, then insert the destination ●kette (duplicate). If the file is long, you may need to alternate the source and destination diskettes several times.

You can use wild cards with this option if you want to duplicate a group of files; however, your files are still copied one at a time. You have to alternate diskettes as least once per file. The first example illustrates how to duplicate a single file. The second example shows how you can use a wild card to duplicate a group of files.

```
COMPUTER:    SELECT ITEM OR RETURN FOR MENU
YOU TYPE:    O
COMPUTER:    NAME OF FILE TO MOVE?
YOU TYPE:    MYFILE
COMPUTER:    INSERT SOURCE DISK, TYPE RETURN
YOU TYPE:
COMPUTER:    INSERT DESTINATION DISK, TYPE RETURN
YOU TYPE:
COMPUTER:    SELECT ITEM OR RETURN FOR MENU
```

```
COMPUTER:    SELECT ITEM OR RETURN FOR MENU
YOU TYPE:    O
COMPUTER:    NAME OF FILE TO MOVE?
YOU TYPE:    FILE?.BAS
COMPUTER:    INSERT SOURCE DISK, TYPE RETURN
YOU TYPE:
COMPUTER:    COPYING--D1:FILE1.BAS
             INSERT DESTINATION DISK, TYPE RETURN
YOU TYPE:
COMPUTER:    INSERT SOURCE DISK, TYPE RETURN
YOU TYPE:
COMPUTER:    COPYING--D1:FILE2.BAS
             INSERT DESTINATION DISK, TYPE RETURN
YOU TYPE:
```

This continues until the computer has duplicated all the files that fit the wild card specification.

It's generally faster to duplicate an entire ▼ diskette using the Duplicate File option rather than the Duplicate Disk option. This is because the Duplicate Disk option duplicates *all* of the diskette, except the DOS.SYS and DUP.SYS files. The exception to this general rule occurs when the diskette is nearly full. To duplicate all the files on a diskette, use the wild card format *.* to specify all filenames and extenders.

DUPLICATING A DISK

Because Duplicate Disk is slower than Duplicate File (using the wild card *.* format), you may only want to use this option when you want an *exact* duplicate of a diskette. The Duplicate Disk process is a sector-by-sector copying technique, not file-by-file as is the case with Duplicate File. This means that not only are all your files copied from the source to the destination diskette, but they are also located in the same place on both diskettes. The directory of the source diskette is also copied onto the destination diskette. Therefore, any files previously stored on the destination diskette are lost.

Like the Duplicate File option, Duplicate Disk involves alternating between the source and destination diskettes until the duplication process is complete. Because there is a great deal of swapping, it's wise to write-protect your source diskette just in case you accidentally confuse the two. Write protection is done by folding one of the self-adhesive tabs over the write-protect notch, as described in the part of the *ATARI 810™ Owner's Guide* titled "Taking Care Of Your Diskettes."

The following example illustrates the use of this DOS option.

```
COMPUTER: SELECT ITEM OR RETURN FOR MENU
YOU TYPE:  J
COMPUTER: DUP DISK—SOURCE, DEST DRIVES?
YOU TYPE:  1,1
COMPUTER: INSERT SOURCE DISK, TYPE RETURN
YOU TYPE:
COMPUTER: INSERT DESTINATION DISK, TYPE RETURN
YOU TYPE:  1
```

●

The Delete File option allows you to remove one or more files from a diskette. Wild cards can be used with this option. The following example illustrates how to delete a single file.

```
COMPUTER: SELECT ITEM OR RETURN FOR MENU
YOU TYPE:  D [RETURN]
COMPUTER: DELETE FILE SPEC
YOU TYPE:  D:MYFILE
COMPUTER: TYPE "Y" TO DELETE...
           D1:MYFILE.  ?
YOU TYPE:  Y [RETURN]
```

The next example shows you how to use the wild card feature to delete a group of files.

```
COMPUTER: SELECT ITEM OR RETURN FOR MENU
YOU TYPE:  D [RETURN]
COMPUTER: DELETE FILE SPEC
YOU TYPE:  D:FILE ?.BAS [RETURN]
COMPUTER: TYPE "Y" TO DELETE...
           D1:FILE1.BAS ?
YOU TYPE:  Y [RETURN]
COMPUTER: D1:FILE2.BAS ?
YOU TYPE:  Y [RETURN]
COMPUTER: D1:FILE3.BAS ?
YOU TYPE:  Y [RETURN]
COMPUTER: D1:FILE4.BAS ?
YOU TYPE:  Y [RETURN]
COMPUTER: SELECT ITEM OR RETURN FOR MENU
```

21
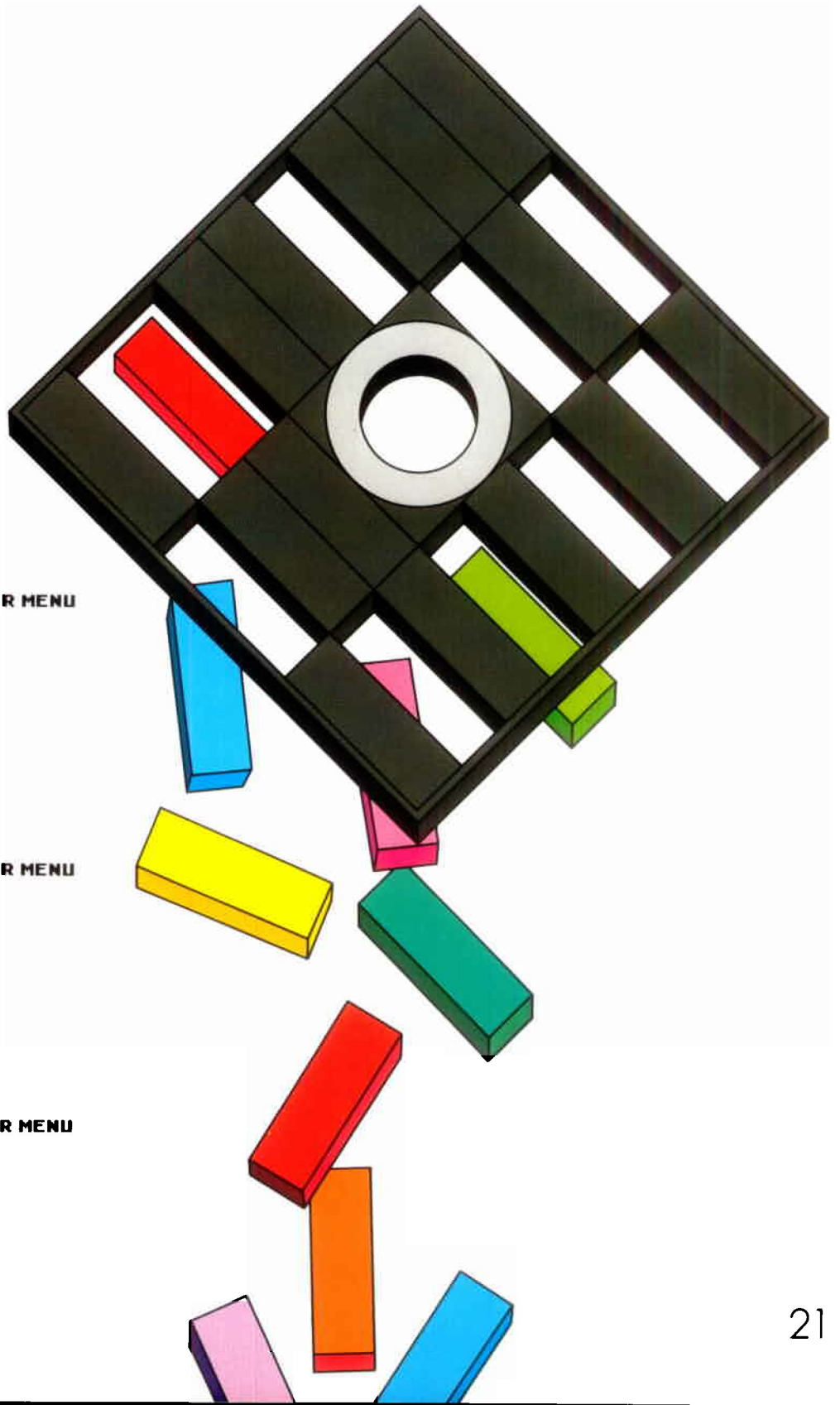
WHAT TO DO IF IT DOESN'T WORK

In most cases, if your ATARI 810™ Disk Drive fails to work, an Error message appears on your television screen. If you get an error message, don't worry. You haven't broken anything. The most common error messages and their solutions are listed here.

However, there are other error messages that may occur from time to time. For a more comprehensive list, see the *ATARI BASIC Reference Manual* or the *ATARI Disk Operating System Manual*.
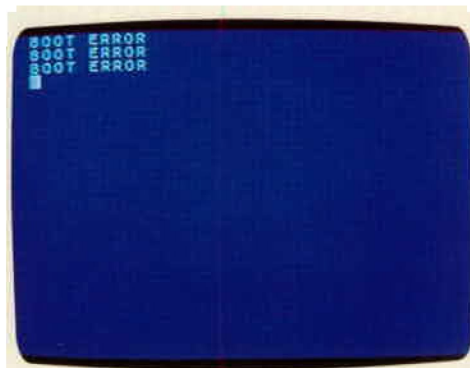
BOOT ERROR

If this message appears on your television screen, check the following:

- Is a diskette correctly loaded into the disk drive?
- If so, does it contain the Disk Operating System (DOS)?
- Is the disk drive door closed?
- Is the disk drive turned on?

ERROR—   2 AT LINE (. . .)

Although your program has probably been loaded, this error message tells you at which line in your program the error occurred and probably indicates one of the following conditions:

- There is an error in your BASIC program. List the program to the screen and check for errors, particularly at the line number mentioned in the error message.
- A peripheral device called for in your program is not turned on. Check all the peripheral devices in your system.
- You do not have the necessary equipment in your system to run the program; for instance, an ATARI Printer. Check the package in which the program came or the program listings to see what peripheral devices are necessary.
- Your system does not contain enough computer memory (RAM) to run the program. If you think your system does not contain enough RAM, turn the computer console off and then on again. Load the program again. If it still does not load, you may need an additional ATARI Memory Module™.
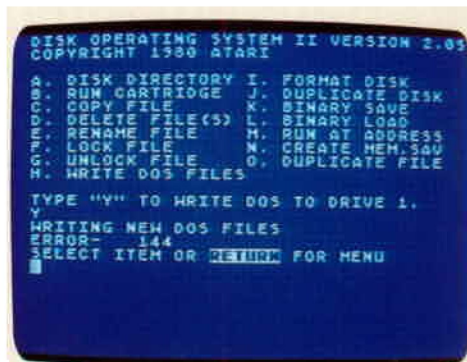
ERROR 21

You tried to load a non-load file (one that was listed to the disk drive using the LIST command). Try using the command: ENTER "D:program name".

ERROR 144

- You may be trying to save data to a write-protected diskette.
- Your disk drive may be slightly incompatible with your diskette. Try loading the program again.

ERROR 138

This error message means that the computer is not communicating with the disk drive. Are the I/O Data Cords plugged into the computer and disk drive?

ERROR 170

The computer is telling you that it cannot find the program you are trying to load. You might have misspelled the program name when you typed it into the computer.

If you cannot get your ATARI 810™ Disk Drive to work, then call us. Our Customer Service people will be happy to help. Call 800/538-8737 toll free from anywhere in the continental U.S. (In California call toll free 800/672-1430.)

WHERE TO GO FROM HERE

Once you have become familiar with the basic DOS functions, continue learning about DOS by reading the *ATARI Disk Operating System II Reference Manual*. You'll find a number of additional functions covered there that will come in quite handy for you.

For example, CREATE MEM. SAV automatically saves programs in the computer memory onto diskette so you don't write over them when loading another program. RENAME FILE lets you change file names or extenders. LOCK FILE and UNLOCK FILE protect the contents of individual files against accidental changes.

BINARY SAVE, BINARY LOAD, and RUN AT ADDRESS are functions intended for advanced users. These functions save and load information in the "object file" format.

And if you acquire a second disk drive, the reference manual also tells you how to use DOS with multiple drives.