

CAT 100 MS DOS Notes

Introduction to DOS

Tutorial 1 Summary: Understanding DOS

In this tutorial, you learn that operating system software plays an important role in the management and use of a computer system. DOS is the predominant operating system software used on IBM microcomputers and IBM compatibles.

The primary storage media used on microcomputer systems are the hard disk and the diskette. Diskettes differ in their storage capacities and sizes and must be used in disk drive units that support them. Documents and programs are stored in files on a diskette or on a hard disk. Each file has a filename that you provide. The filename identifies the file's location on the disk and its contents. When you save a file to disk, you might also need to provide a drive name so that a document is stored on the correct drive.

After you boot a computer system, DOS displays the DOS prompt unless your computer system is customized. You can enter internal or external commands at the DOS prompt. In this tutorial the following DOS commands will be reviewed.

- VER command to display the version of DOS installed on a computer system
- DATE & TIME commands to set, or verify, the date and time used by a computer system
- CLS command to clear the screen
- DOSKEY command to load a Terminate-and Stay Resident program to keep track of commands that are entered at the DOS prompt. You recall those prior commands with the Up and Down Arrow keys
- FORMAT command to prepare a diskette for use on a computer system. The Format capacity switch allows for formatting double-density diskettes in high-density or extra-high density disk drives and high-density diskettes in extra-high density drives.
- Changing a default drive by specifying the name of the drive to be used as the new default drive
- DISKCOPY command used to make duplicates copies of a diskette
- [DOS command]/? Help switch to obtain help information on any DOS command

Tutorial 2 Summary: Displaying Directories

In this tutorial, we learn how to display directories. The following DOS commands will be reviewed.

- DIR command to display a list of the names of files stored on a diskette in the current drive, another drive, or a hard

- drive

- DIR /P command (Pause switch) to display directory listings/filenames one screen at a time

- DIR /W command (Wide switch) to display directory listings/filenames in five columns across the screen.

- DIR /O command (Order switch) and its optional sort order parameters to display directory listings/filenames in order

- by name, extension, size, data, and time. We also can reverse this order by placing a minus sign in front of the sort

- order parameter

- DIR /L command (lowercase switch) to display directory listings/filenames in the lowercase rather than uppercase. As

- we work with various switches for the DIR command, we use the DOSKEY to recall and edit previously entered

- commands

- We substitute the question mark ? and asterisk * wildcards for part or all of a filename to select groups of files with

- similar filenames. We also can combine these two wildcards with each other and with switches to control the

- directory display

- SET command to specify default switches for the DIR command and to view the contents of the DOS environment. We

- can display a directory with these default switches, and can override a switch in the DOS environment

- C:/> We will usually work with the DOS command line interface at the DOS prompt

- DOSSHELL command loads and the DOS Shell graphical user interface. Although we will not be using the DOS

- Shell, you may explore its screen features and its windows

Tutorial 3 Summary: Working with Files

In this tutorial, we will learn the importance of ASCII files and study many of their features. The following DOS commands will be reviewed.

- TYPE command to view the contents of an ASCII file.

- TYPE | MORE command (filter) to display the contents of an ASCII file one screen at a time

- PRINT command to print the contents of an ASCII (text) file

- COPY command copies the contents of a file (called the source file) and produces a new file (called the destination, or target, file). You can copy files to the same diskette, a different diskette, and a hard drive or other storage media

- using a different or the same filename

- REN command to rename a file or a group of files

- DEL command to delete a file or a group of files; the Prompt for Verification switch (/P) asks if you want to delete the file(s)

Tutorial 4 Summary: Using Subdirectories

In this tutorial we learn how to work with subdirectories from the DOS prompt. The following DOS commands will be reviewed.

- MD command to create, or make, a subdirectory
- CD command to change from one directory to another
- CD.. command to change to the directory above the current directory
- CD\ command to change from the current directory to the root directory
- MOVE command moves one or more files to another drive, directory, or drive and directory
- PROMPT command customizes the appearance of the DOS command
- TREE command displays a diagram of the directory tree; the /F switch includes filenames with the directory tree, and
 - the /A switch displays the lines in the directory tree with ASCII characters

At the DOS prompt you can use the DIR command to display contents of subdirectories. The COPY command to copy files from one subdirectory to another. You can also print a directory tree from the DOS prompt with the TREE command and included filenames by directory.

Tutorial 5 Summary: Managing a Hard Disk

In this tutorial, we learn how to evaluate the organization of directories on a hard disk and diskette. We will develop a plan for reorganizing directories on the Tutorial Disk. Modify the directory structure from the DOS prompt so that we can more easily and quickly locate files and access information on a diskette.

We will use commands at the DOS prompt to move subdirectories and their files, as well as rename and remove subdirectories. The following DOS commands will be reviewed.

DIR/S command searches through subdirectories for filenames that match the file specification and then displays the full path of matching filenames

RD command to remove empty subdirectories from the directory structure of a diskette or hard drive.

DEFRAG command, a DOS utility that optimizes directories and eliminates or reduces file fragmentation.

MSAV command, a DOS utility that checks for the presence of computer viruses and, if necessary, cleans or removes computer viruses from a diskette or hard drive

Tutorial 6 Summary: Backing Up a Hard Disk

In this tutorial we learn how to use MSBACKUP to backup files from a hard disk to diskettes or other storage media and to
restore files from diskettes or other storage media to a hard disk. We learn how to perform a compatibility test and to
configure MSBACKUP for the hardware in a computer system.

The importance of developing a backup strategy will be emphasized. The use of full, incremental, and differential backups
as well as their advantages and disadvantages. We will learn how to integrate these backups in an overall backup strategy.

The following DOS commands will be reviewed.

BACKUP command backs up an entire hard drive, a directory, a group of files, or a single file onto a set of backup

diskettes or other storage media

RESTORE command restores an entire hard disk, a directory, a group of files, or a single file from a set of backup

diskettes or other storage media

DELTREE command deletes a directory tree, all of its subdirectories, and all files in the specified directories

XCOPY command copies a directory and its subdirectories and files, a group of files, or a single file to another disk or

other storage media

Tutorial 7 Summary: Using Troubleshooting Tools

In this tutorial, we learn to prepare a boot disk with the System switch when you first format a diskette. You may also use

the SYS command to prepare a boot disk by copying operating system files to a newly formatted diskette.

We will use the DIR command and its Attribute switch and the Attribute command to understand attributes assigned to files in a directory and to change those attributes.

We will also check the status of hard disks, examine technical information about the computer system and examine

different techniques and different levels of protection for tracking deleted files. The following DOS commands will be reviewed.

ATTRIB command to display and change file attributes using common switches.

CHKDSK command examines the status of a hard disk or diskette, checks for the presence of errors, and produces a

report on disk memory usage; when used with the Fixup switch (/F), this command converts lost clusters to files

DIR/A command displays a directory of files with a specific attribute when used with the Attribute switch

Tutorial 8 Summary: Using Batch Files

In this tutorial, we learn the importance of batch files in automating routine DOS command operations. We use the MS-DOS Editor (**Edit.exe**) to create both simple and complex batch files using proper documentation. Batch files will be tested to guarantee their effectiveness.

The importance of the DOS path will be examined. We will view, redirect the output and modify the DOS path. The following DOS commands will be reviewed.

- [batch filename] command executes the contents of a batch file
- ECHO command controls the display of batch file commands
- EDIT command loads the MS DOS editor, a text editor program for creating and editing ASCII or text files
- PATH command displays the DOS path
- PAUSE command temporarily pauses the execution of a batch file and displays a message to press any key to continue
- REM command documents batch file operations