

Lab 2-2

Files and Their Attributes

File

A collection of information that
has been given a name.

Each file name within a directory
must be unique.

A file may contain:

Typed characters: Letters, Documents, etc.

Graphical information: Charts, Drawings, etc.

Mathematical data: Spreadsheets, Graphs, etc.

Audio information: Music, Voice, etc.

Video information: Animations, film clips, etc.

Programs: Operating systems, applications, etc.

File Name

Characters followed by a period.

Followed by up to three characters called an “extension”.

The period and the extension are optional.

FILENAME.DOC



Characters

Up to Three
Characters



Period

MYFILE.TXT

FILE7.AS8

JONESLET

CHAPTER.FIVE
MYF.ILE
9LIVES
M.Y
9-31-07.LET

Characters allowed in file names:

Letters A through Z.

Numerals 0 through 9.

These 15 special characters:

\$ # & @ !

() - { }

' ~ ^ ,

_

Characters NOT allowed in file names:

Any control character.

The space character.

The following 15 special characters:

+ = / []
“ : ; , ?
* \ < > |

FILENAMES.DOC

FILENAME.DOCS

MY FILE.TXT

MY/FILE.TXT

ME&YOU\$.T?T

MYFILE.DOC

Avoid Reserved Names

MS-DOS Command Names: COPY, DEL, FORMAT, MOVE, TIME, XCOPY, etc.

MS-DOS Device Names: COM1, LPT2, CON, NUL, CLOCK\$, etc.

Avoid Reserved Command Names.

APPEND

ATTRIB

BREAK

CD

CHKDSK

CLS

COMMAND

COPY

CTTY

DATE

DEBUG

DEFRAG

DEL

FC

FIND

FOR

FORMAT

Etc.

Avoid Reserved Device Names.

A:	COM1	AUX	LPT1
B:	COM2	PRN	LPT2
C:	COM3	CON	LPT3
D:	COM4	NUL	LPT4
etc		CLOCK\$	

Logical Devices Vs. Physical Devices.

Physical Device

A piece of hardware

Something you can hold in your hand.

A disk drive, a printer, a keyboard, etc.

Logical Device

A software representation of a physical device.

An address in memory that is treated as if it were the physical device.

Logical devices require reserved names.

Common Extensions

BAK - Backup

BAT - Batch

BMP - Bitmap

COM - Executable

DLL - Dynamic Link Library

DOC - Document

DRV - Device Driver

EPS - Encapsulated PostScript

EXE - Executable

HLP - Help

LET - Letter

MP3 – Mpeg Audio

OVL - Overlay

PIF - Program

Information File

TIF - Tagged Image

File Format

XLS - Excel

Spreadsheet

ZIP - Compressed

These extensions indicate that the file can be executed from the command prompt.

.EXE

.COM

.BAT

Priority of executable extensions:

.COM

.EXE

.BAT

Attribute - A property or characteristic of a file that the operating system keeps track of for you.

Attributes

Archive

Hidden

Read-only

Subdirectory

System

Volume Label

The Archive Attribute

A flag that tells the OS that the file has been changed since it was last archived.

Can be used with data backup tools to speed the backup process by copying only those files that have changed since the last backup.

The Hidden Attribute

A flag that tells the OS to keep this file “hidden” or “invisible” to most file management commands and to the casual user.

Hidden files are not listed by the DIR command nor copied by the COPY command.

The Read-only Attribute

A flag that prevents the OS from overwriting a file.

This attribute prevents the file from being erased or modified by some commands.

The System Attribute

A flag that tells the OS that the file is part of the operating system.

For example, IO.SYS and MSDOS.SYS files have their system attributes set.

The Subdirectory Attribute

A flag that identifies the entry as a directory rather than as a file.

Prevents the OS from attempting to handle a directory as a user file.

Handled entirely by the OS. User has no control over this attribute.

The Volume Label Attribute

A flag that identifies an entry as a volume label rather than as a file.

A volume label is a special name that the OS assigns to a disk.

Handled entirely by the OS. User has no control over this attribute.

The user can control four of these attributes.

Archive

Hidden

Read-only

System

The ATTRIB command.

View the attributes of a file.

Change the attributes of a file.

You change a file's attributes with the **ATTRIB** command.

- +R or -R turns ON or OFF the Read-only attribute.
- +A or -A turns ON or OFF the Archive attribute.
- +S or -S turns ON or OFF the System attribute.
- +H or -H turns ON or OFF the Hidden attribute.

Now it is *your* turn...