# IT Essentials 5.0

# 5.3.7.2 Lab - Working with CLI Commands in Windows

# Introduction

Print and complete this lab.

In this lab, you will use Windows CLI commands to manage folders, files and programs in Windows 7/Vista/XP.

# **Recommended Equipment**

The following equipment is required for this exercise:

• A computer running Windows 7 or Windows Vista or Windows XP

### Step 1

Logon to the computer as an administrator.

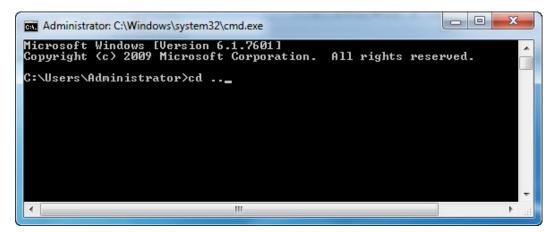
**Note**: If you logon with a user account other than "Administrator", you will need to substitute that user account name with the "Administrator" account name when typing in commands. Example: **cd Users\Administrator** replaced with **cd Users\Braxton** 

For Windows 7 and Vista: Navigate to the "Run" window by clicking **Start**. Type **cmd** and then press **Enter**.

For Windows XP: Navigate to the "Run" window by clicking **Start > Run**. Type **cmd** and click **OK**.

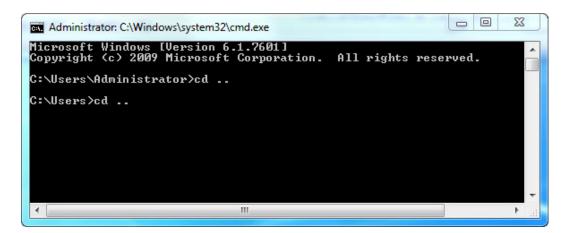
### Step 2

The command window opens.

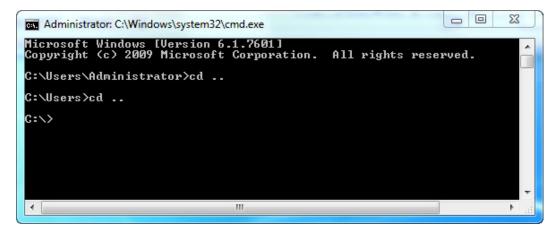


#### What directory are you at?

At the command prompt, type **cd**.. then press **Enter**.



At the command prompt, type cd .. again then press Enter.



What directory are you at now?

### Step 3

At the command prompt, type **help** and then press **Enter**.

Administrator: 0	:\Windows\system32\cmd.exe
	· · · · · · · · · · · · · · · · · · ·
C:\>help	
For more info ASSOC	rmation on a specific command, type HELP command-name Displays or modifies file extension associations.
ATTRIB	Displays or changes file attributes.
BREAK	Sate on classe extended CTPL+C checking
BCDEDIT	Sets properties in boot database to control boot loading.
CACLS	Displays or modifies access control lists (ACLs) of files.
CALL	Calls one batch program from another.
CD CHCP	Displays the name of or changes the current directory.
CHDIR	Displays or sets the active code page number. Displays the name of or changes the current directory.
CHKDSK	Checks a disk and displays a status report.
CHKNTFS	Displays or modifies the checking of disk at boot time.
CLS	Clears the screen.
CMD	Starts a new instance of the Windows command interpreter.
COLOR	Sets the default console foreground and background colors.
COMP COMPACT	Compares the contents of two files or sets of files.
CONVERT	Displays or alters the compression of files on NTFS partitions. Converts FAT volumes to NTFS. You cannot convert the
OONVENT	current drive.
COPY	Copies one or more files to another location.
DATE	Displays or sets the date.
DEL	Deletes one or more files.
DIR	Displays a list of files and subdirectories in a directory.
DISKCOMP DISKCOPY	Compares the contents of two floppy disks. Copies the contents of one floppy disk to another.
DISKCOPI	Displays or configures Disk Partition properties.
DOSKEY	Edits command lines, recalls Windows commands, and
	creates macros.
DRIVERQUERY	Displays current device driver status and properties.
ECHO	Displays messages, or turns command echoing on or off.
ENDLOCAL ERASE	Ends localization of environment changes in a batch file. Deletes one or more files.
EXIT	Quits the CMD.EXE program (command interpreter).
FC	Compares two files or sets of files, and displays the
	differences between them.
FIND	Searches for a text string in a file or files.
FINDSTR	Searches for strings in files.
FOR FORMAT	Runs a specified command for each file in a set of files. Formats a disk for use with Windows.
FSUTIL	Displays or configures the file system properties.
FTYPE	Displays or modifies file types used in file extension
	associations.
GOTO	Directs the Windows command interpreter to a labeled line in
ODDEOULT	a batch program. Diana and a bigging and a b
GPRESULT GRAFTABL	Displays Group Policy information for machine or user. Enables Windows to display an extended character set in
OVHI, I HDP	graphics mode.
HELP	Provides Help information for Windows commands.
ICACLS	Display, modify, backup, or restore ACLs for files and
	directories.
IF	Performs conditional processing in batch programs.
LABEL	Creates, changes, or deletes the volume label of a disk.

Note: More commands show on next page.

Administrator: (	C:\Windows\system32\cmd.exe	
MD	Creates a directory.	
MKDIR	Creates a directory.	^
MKLINK	Creates Symbolic Links and Hard Links	
MODE	Configures a system device.	
MORE	Displays output one screen at a time.	
MOVE	Moves one or more files from one directory to another	
	directory.	
<b>OPENFILES</b>	Displays files opened by remote users for a file share.	
PATH	Displays or sets a search path for executable files.	
PAUSE	Suspends processing of a batch file and displays a message.	
POPD	Restores the previous value of the current directory saved by	
	PUSHD.	
PRINT	Prints a text file.	
PROMPT	Changes the Windows command prompt.	
PUSHD	Saves the current directory then changes it.	
RD	Removes a directory.	
RECOVER	Recovers readable information from a bad or defective disk.	
REM	Records comments (remarks) in batch files or CONFIG.SYS.	
REN	Renames a file or files.	
RENAME	Renames a file or files.	
REPLACE	Replaces files.	
RMDIR	Removes a directory.	
ROBOCOPY	Advanced utility to copy files and directory trees	
SET	Displays, sets, or removes Windows environment variables.	
SETLOCAL	Begins localization of environment changes in a batch file.	
SC	Displays or configures services (background processes).	
SCHTASKS	Schedules commands and programs to run on a computer.	
SHIFT	Shifts the position of replaceable parameters in batch files.	
SHUTDOWN	Allows proper local or remote shutdown of machine.	
SORT	Sorts input.	
START SUBST	Starts a separate window to run a specified program or command.	
SUBSI SYSTEMINFO	Associates a path with a drive letter.	
TASKLIST	Displays machine specific properties and configuration. Displays all currently running tasks including services.	
TASKKILL		
TIME	Kill or stop a running process or application. Displays or sets the system time.	
TITLE	Sets the window title for a CMD.EXE session.	
TREE	Graphically displays the directory structure of a drive or	
1.011.07.07	path.	
ТҮРЕ	Displays the contents of a text file.	
VER	Displays the Vindows version.	
<b>VERIFY</b>	Tells Windows whether to verify that your files are written	
	correctly to a disk.	
VOL	Displays a disk volume label and serial number.	
XCOPY	Copies files and directory trees.	
WMIC	Displays WMI information inside interactive command shell.	
FOF MOPE INFO	rmation on tools see the command-line reference in the online help.	
C:\>_		
		*

Explain what the following commands do.

ATTRIB:

CD or CHDIR:

CLS:

COPY:

DEL:

DIR:

EXIT:

MD or MKDIR:

Move:

RD or RMDIR:

ROBOCOPY (Note, this command only works in Windows Vista and Windows 7):

XCOPY:

### Step 4

At the command prompt, type **dir** and then press **Enter**.

Administrato	or: C:\Windows\sys	tem32\cmd.exe		
07/13/2009 09/17/2012 07/10/2012 09/11/2012 04/11/2008 04/11/2008 04/11/2008 10/02/2012 c:\>	07:37 PM 08:59 PM 01:31 PM 03:35 PM 10:07 AM 10:09 AM 10:11 AM 06:26 AM 28 File(s 10 Dir(s)	3,797,: 233, <dir> &gt; 5,578</dir>	PerfLogs Program Files Sandbox Users 686 vcredist.bmp 292 VC_RED.cab 472 VC_RED.MSI Windows ,159 bytes 7,920 bytes free	▲ □ ▼

**Note**: For Windows XP, replace Users with Documents and Settings. You will need to do this for the rest of the lab.

Is there a directory (DIR) called Users?

At the command prompt, type **cd users** and then press **Enter**.



At the command prompt, type **dir** and then press **Enter**.

Volume Ser	ial Number is 8	3A89-4C5F		
Directory	of c:\Users			
9/11/2012	03:35 PM <i< th=""><th></th><th></th><th>0</th></i<>			0
9/11/2012		DIR>		
9/07/2012	01:36 PM <1	DIR>	Administrator	
9/11/2012	03:35 PM <i< td=""><td>)IR&gt;</td><td>DefaultAppPool</td><td></td></i<>	)IR>	DefaultAppPool	
4/11/2011		)IR>	Public	
6/18/2012		DIR>	SBC	
	Ø File(s)		0 bytes	
	6 Dir(s) 4	151.973.898.	240 bytes free	

Is there a directory listed for the account you are logged on to the computer with?

What is that account name?

At the command prompt, change to the account name in which you are logged on. Example: Type **cd administrator**, and then press **Enter**.

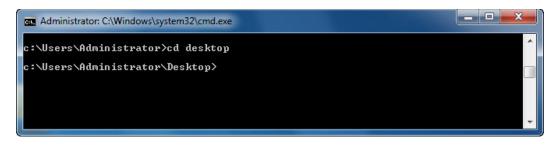
👞 Administrato	or: C:\Windows\sy:	tem32\cmd.ex	e	
Directory	of c:\Users			
09/11/2012 09/11/2012 09/07/2012 09/11/2012 04/11/2011 06/18/2012	03:35 PM 03:35 PM 01:36 PM 03:35 PM 03:35 PM 07:21 PM 07:21 PM 07:21 PM 07:21 PM 07:21 PM 07:21 PM 07:21 PM 07:21 PM		Administrator DefaultAppPool Public SBC Ø bytes 898,240 bytes free	
c:\Users>cd	administrat	or		
c:\Users\Ad	ministrator>			-

At the command prompt, type **dir** and then press **Enter**.

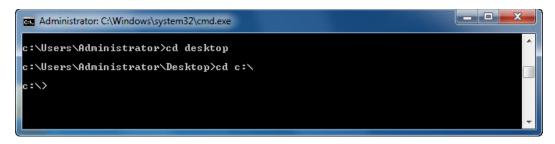
Administrator: C:\Windows\system32\cmd.exe
c:\Users\Administrator≻dir Volume in drive C has no label. Volume Serial Number is 8A89-4C5F
Directory of c:\Users\Administrator
09/07/2012   01:36 PM   (DIR)      09/07/2012   01:36 PM   (DIR)      09/07/2012   09:13 PM   (DIR)      09/07/2012   09:13 PM   (DIR)      10/03/2012   12:48 PM   192 .packettracer     10/03/2012   01:12 PM   (DIR)   Aspire-CANA     09/07/2012   01:41 PM   (DIR)   Cisco Packet Tracer 5.3.3     09/14/2012   08:35 PM   (DIR)   Documents     09/11/2012   08:55 PM   (DIR)   Documents     09/11/2012   08:57 PM   (DIR)   Documents     09/11/2012   08:57 PM   (DIR)   Favorites     09/11/2012   09:02 PM   (DIR)   Music     09/11/2012   09:02 PM   (DIR)   Music     09/11/2012   09:02 PM   (DIR)   Music     09/14/2012   11:57 AM   (DIR)   Saved Games     09/14/2012   11:57 AM   (DIR)   Searches     09/14/2012   11:57 AM   (DIR)   Searches     09/14/2012   11:57 AM   (DIR)   Searches </td
c:\Users\Administrator>

Notice there is a directory called "Desktop".

At the command prompt, type cd desktop and then press Enter.



At the command prompt, type **cd c:\** and then press **Enter**.



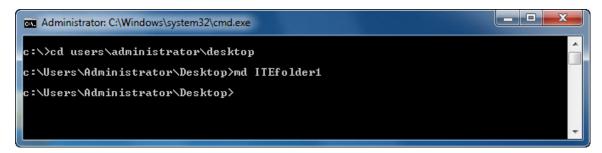
At the command prompt, type **cd user/administrator/desktop** and then press **Enter**.

Note: Change "administrator" with the name you are logged onto the computer.

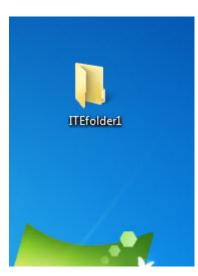


### Step 5

At the command prompt, type **md ITEfolder1** and then press Enter.



Look at the "Desktop".

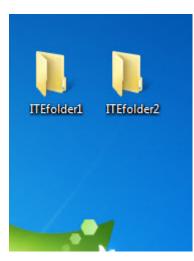


What do you see?

Make another folder at the "Desktop".



At the command prompt, type **md ITEfolder2** and then press Enter.



Do you now have two folders at the "Desktop" labeled "ITEfolder1" and "ITEfolder2"?

If not, ask the instructor for assistance.

### Step 6

At the command prompt, type **cls** and then press **Enter**.



What happened?

Now you will make a file and save it to ITEfolder1.

es. Adminis	trator: C:	\Windows\sy	/stem32\	cmd.exe - edit			x
File	Edit	Search	View	Options Help UNTITLED1			
				UNITIALDI			Ť.
F1=Help	8.				Line:1	Col:1	Ļ

At the command prompt, type **edit** and then press **Enter**.

In the DOS editor, type This file belongs in ITEfolder1.

Gen Administrator: C:\Windows\system32\cmd.exe - edit	_ <b>_</b> X
File Edit Search View Options Help	
This file belongs in ITEfolder1.	ti da
	0
F1=Help	Line:1 Col:33

Press the following key combination **Alt** and **F** at the same time.

	\Windows\system32\cm		
File Edit	Search View C	Options Help	 
New Open Save Save As Close Print	in ITEfolde	er1.	4
E×it			
Creates a new	file		

When the "File" menu opens, press the **A** key.

Administrator: C:\W	indows\system32\cmd.exe - edit	
File Edit	Save As	
This file belo	File Name: [ C:\Users\Administrator\Desktop	-1
	Existing Files:   Directories:     AdobeAlRInstaller.ex1   Anache_OpenOffice_in     Apache_OpenOffice_in   Aries     Drivers Licenses   ITEfolder1     irPhone Simulator.lnk   ITEfolder2     irPhone Simulator.lnk   ITT Course materi     Outlook_make a card   OpenOffice.org 3.     Raven Project   I-C-1     > OK   Cancel   Help	
F1=Help Enter		

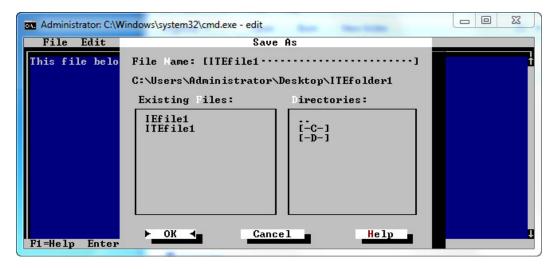
Press the following key combination **Alt** and **D**, and then press the down arrow key until the folder **ITEfolder1** is selected.

Administrator: C:\W	/indows\system32\cmd.exe - edit	
File Edit	Save As	
This file belo	File Name: [ITEfolder1\] C:\Users\Administrator\Desktop Existing Files: Directories:	
	AdobeAIRInstaller.exi Apache_OpenOffice_in Apache_OpenOffice_in Cisco Packet Tracer. intro.htm iPhone Simulator.lnk iTuesSetup.exe Outlook_make a card SharePointDesigner.exi start - ITE.lnk	
F1=Help Enter	► OK ◀ Cancel Help	

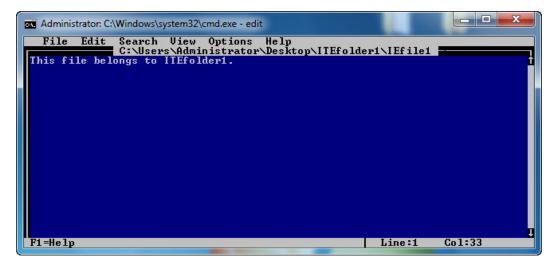
Press Enter.

Press the Tab key four times, until the curser is located at the "File Name:" field.

Type the "File Name:" ITEfile1.



Press Enter.



Where is the file saved ?

Press Alt and F, and then press X.

	ows\system32\cmd.exe - edit	
	rch View Options Help sers\Administrator\Desktop\ITEfolder1\I to ITEfolder1.	Efile1
Creates a new file	3	

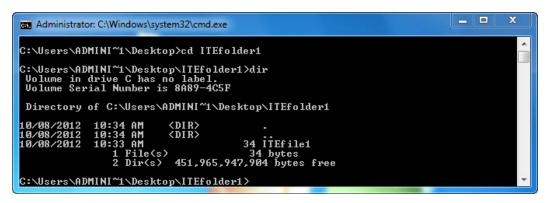
Open the "ITEfolder1" on the "Desktop".



What do you notice?

### Step 7

At the command prompt, type **cls** and then press **Enter**.



At the command prompt, type cd ITEfolder1, press Enter, and then type dir.

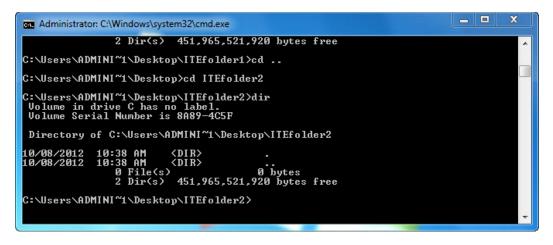
How many files are listed?

What is the size of the file?

At the command prompt, type **cd** .. and then press **Enter**.

Type cd ITEfolder2 and then press Enter.

Type **dir** and then press **Enter**.



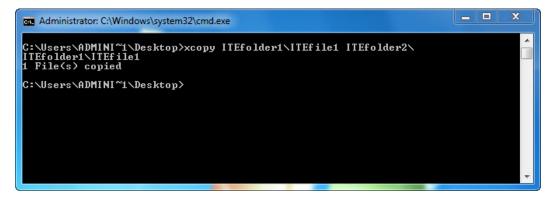
How many files are listed?

### Step 8

Type **cd** .. and then press **Enter**.

Type cd .. and then press Enter.

At the command prompt, type **cls**.



At the command prompt, type xcopy ITEfolder1\ITEfile1 ITEfolder2\.

How many files were copied?

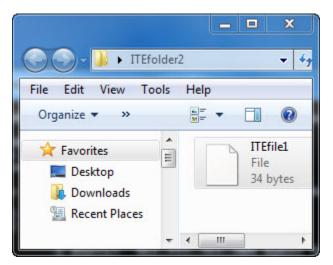
Administrator: C:\Windows\system32\cmd.exe	
C:\Users\ADMINI~1\Desktop>cd ITEfolder2 C:\Users\ADMINI~1\Desktop\ITEfolder2>dir Volume in drive C has no label. Volume Serial Number is 8A89-4C5F	
Directory of C:\Users\ADMINI~1\Desktop\ITEfolder2 10/08/2012 11:04 AM <dir> 10/08/2012 11:04 AM <dir> 10/08/2012 11:02 AM 34 ITEfile1 1 File(s) 34 bytes 2 Dir(s) 451,912,994,816 bytes free</dir></dir>	
C:\Users\ADMINI~1\Desktop\ITEfolder2>	*

Type cd ITEfolder2 and press Enter, then type dir, and then press Enter.

How many files are listed?

What is the size of the file?

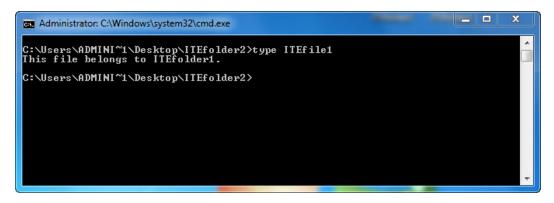
Open the ITEfolder2 on the Desktop".



What do you notice?

### Step 9

At the command prompt, type **cls** and then press **Enter**.

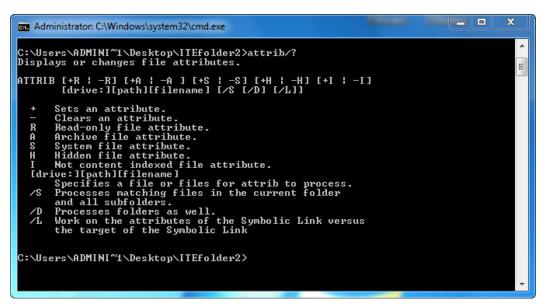


Type type ITEfile1 and then press Enter.

What is displayed after the command you just typed?

#### Step 10

At the command prompt, type **attrib/?** and then press **Enter**.



Define the following attributes:

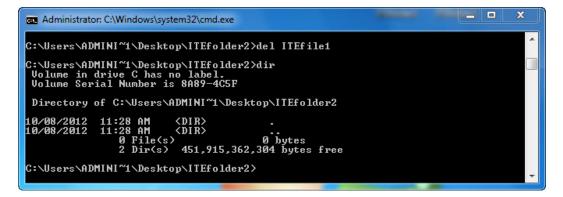
R – A – S – H – At the command prompt, type attrib and then press Enter.



What attribute does the ITEfile1 file have?

### Step 11

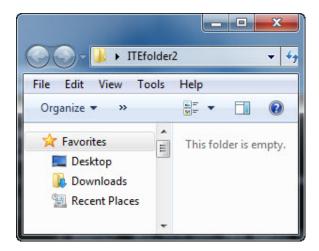
At the command prompt, type **cls** and then press **Enter**.



Type del ITEfile1, press Enter, type dir, and press Enter.

Is the "ITEfile1" file still listed in the directory?

Open the "ITEfolder2" on the Desktop.



What do you notice?

At the command prompt, type **cd** .. and then press **Enter**.

Type rd ITEfolder2 and then press Enter.

Administrator: C:\Windows\system32\cmd.exe						
C:\Users\ADMINI~1\Desktop\ITEfolder2>cd						
C:\Users\ADMINI~1\Desktop>rd ITEfolder2						
C:\Users\ADMINI~1\Desktop)dir Volume in drive C has no label. Volume Serial Number is 8A89-4C5F						
Directory of C:\Users\ADMINI~1\Desktop						
10/08/2012 11:43 AM <dir> . 10/08/2012 11:43 AM <dir> .</dir></dir>						
08/28/2012 11:43 htt 15,428,440 AdobeAIRInstaller.exe 08/20/2012 01:07 PM 15,428,440 AdobeAIRInstaller.exe 08/20/2012 01:07 PM 151,801,119 Apache_OpenOffice_incubating_3.4.0_Win_x8 6 install en-US.exe						
08/20/2012 12:37 PM 151,801,119 Apache_OpenOffice_incubating_3.4.0_Win_x8 6_install_en-US.exe.nx6suh2.partial						
10/03/2012						
07/08/2012 06:28 PM <dir> Drivers Licenses 07/13/2012 06:32 AM 4,123 intro.htm</dir>						
09/07/2012 12:21 PM 1,959 iPhone Simulator.lnk 10/08/2012 11:02 AM <dir> ITEfolder1</dir>						
09/17/2012 07:14 PM <dir> ITT Course materials 09/11/2012 08:58 PM 77,251,480 iTunesSetup.exe</dir>						
09/17/2012 09:00 PM <dir> New folder 08/20/2012 01:13 PM <dir> OpenOffice.org 3.4 (en-US) Installation F iles</dir></dir>						
08/23/2012 01:51 PM 89,750 Outlook_make a card Training.docx 08/13/2012 04:54 PM <dir> Raven Project</dir>						
07/10/2012 04:31 PM 266,433,120 SharePointDesigner.exe 07/09/2012 10:89 AM 1.492 start - ITE.lnk						
09/17/2012 08:59 PM 1,980 tuxtype2-1.5.3.lnk 09/17/2012 08:57 PM 983 Typing Invaders.lnk						
12 File(s) 662,816,766 bytes 9 Dir(s) 451,914,637,312 bytes free						

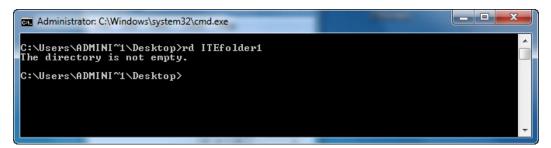
Type **dir** and then press **Enter**.

Is folder "ITEfolder2" listed?

Is folder "ITEfolder2" shown on the "Desktop"?

# Step 12

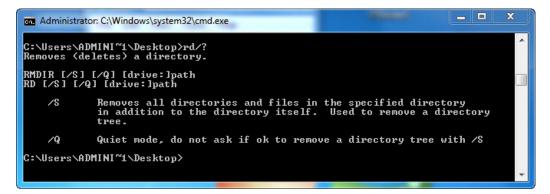
At the command prompt, type **cls** and then press **Enter**.



#### Type rd ITEfolder1 and then press Enter.

What message do you get?

Type rd/?.



What letter can you add to "RD" so all files and the directory are removed?

Type rd ITEfolder1 /s and then press Enter.



When prompted, type Y and press Enter.

Is folder "ITEfolder1" shown on the "Desktop"?

### Step 13

At the command prompt, type **cls** and then press **Enter**.



Type start notepad.exe and press Enter.

What happens?

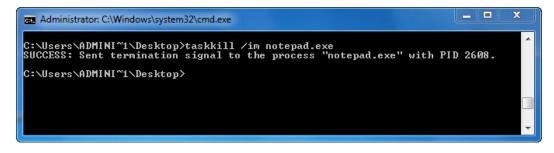
UI UI	ntitled	- Notepa	Н			X	
File	Edit	Format	View	Help			
							*
							-
							t

At the command prompt, type **tasklist** and then press Enter.

Administrator: C:\Windows\system32\cmd.exe				۲
conhost.exe	2748 Console	1	4,684 K	
ntvdm.exe	2100 Console	1	4,140 K	100
notepad.exe	2608 Console	1	4,928 K	
tasklist.exe	1584 Console	1	4,312 K	
WmiPrvSE.exe	2384 Services	Ø	4,836 K	
				_
C:\Users\ADMINI~1\Desktop>				
				1.00
				Ψ.

Is Notepad listed?

Type taskkill /im notepad.exe and press Enter.



What happens?