Lab - Common Windows CLI Commands

Introduction

In this lab, you will use CLI commands to manage files and folders in Windows.

Recommended Equipment

- A computer running Windows

Step 1:   Access the Windows command prompt.

a.   Log on to a computer as a user with administrative privileges. The account **ITEUser** is used as the example user account throughout this lab.

b.   To access the Windows command prompt in Windows 8, navigate to the **Start** screen and type **Command Prompt**. Click **Command Prompt**.
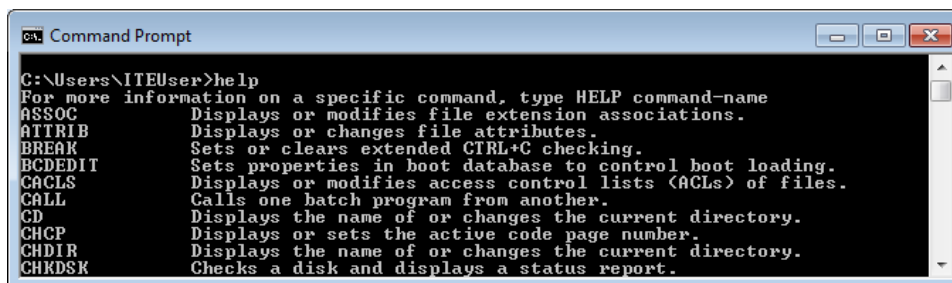
In Windows 7, click **Start** and type **Command Prompt** in the **Search programs and files** field. Click **Command Prompt** to continue.

In Windows Vista, click **Start** and type **Command Prompt** in the **Start Search** field. Click **Command Prompt** to continue.

Step 2:   Display command help from the command prompt.

You can display command line help using the **help** command. For more information on a specific command, type the command followed by **/?**.

a.   At the command prompt, type **help** and press **Enter**. A list of commands is displayed.

```
Command Prompt                                                    _  □  ✕

C:\Users\ITEUser>help
For more information on a specific command, type HELP command-name
ASSOC          Displays or modifies file extension associations.
ATTRIB         Displays or changes file attributes.
BREAK          Sets or clears extended CTRL+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             Displays the name of or changes the current directory.
CHCP           Displays or sets the active code page number.
CHDIR          Displays the name of or changes the current directory.
CHKDSK         Checks a disk and displays a status report.
```
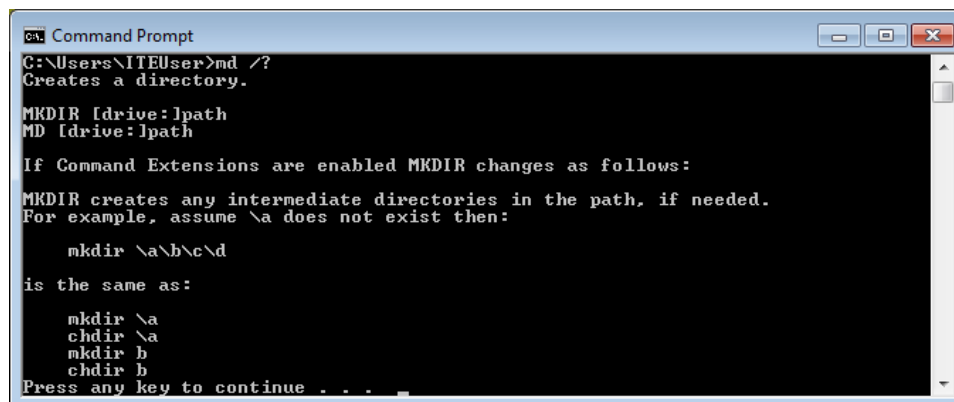
Using the information displayed by the help command, explain the functions of the following commands:

Command	Function
CD	
CHKDSK	
COPY	
DEL	
DIR	
DISKPART	
EXIT	
FORMAT	
GPRESULT	
MD	
TASKLIST	
RD	
ROBOCOPY	
SHUTDOWN	
XCOPY	

b. Type **md /?** at the prompt to display additional information and switches that can be used with this command.
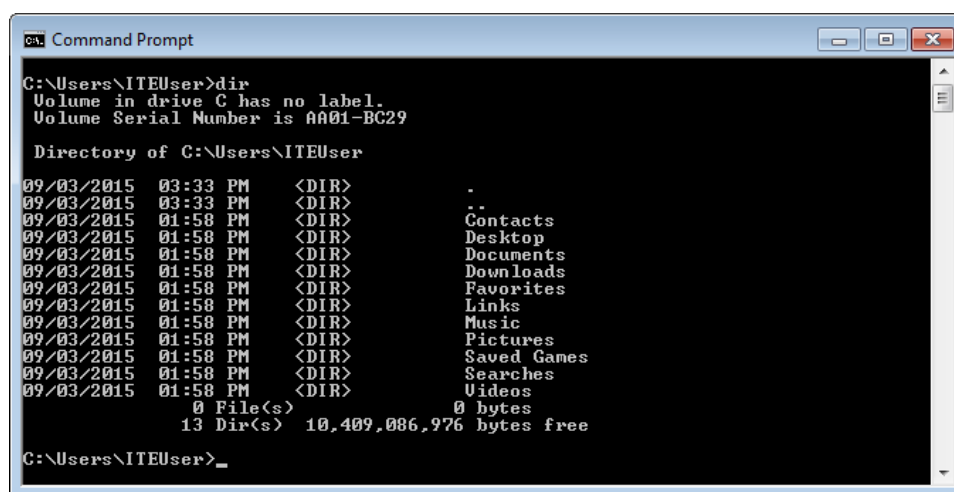
Step 3: Create and change directories.

In this step, you will use the change directory (**cd**), make directory (**md**), and directory (**dir**) commands.

Note: A directory is another word for folder. Directory and folder are used interchangeably throughout this lab.

a. Type **cd** at the command prompt. What is the current directory?

b. Type **dir** at the command prompt to list the files and folders that are in the current folder.

c. In the current directory, use the **md** command to create three new folders: **ITEfolder1**, **ITEfolder2**, and **ITEfolder3**. Type **md ITEfolder1** and press **Enter**. Create **ITEfolder2** and **ITEfolder3**.
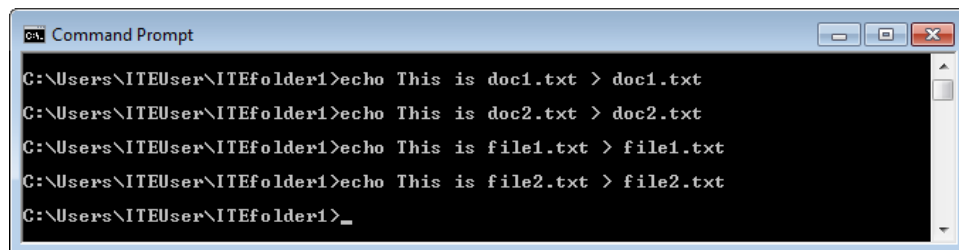

d. Type **dir** to verify the folders have been created.

e. Type **cd ITEfolder3** at the command prompt and press **Enter**. Which folder are you in now?

f. Within the **ITEfolder3** folder, create a folder named **ITEfolder4**. Use the **dir** command to verify the folder creation.

g. Type **cd ..** to change the current directory. Each **..** is a shortcut to move up one level in the directory tree.

After issuing the **cd ..** command, what is your directory now?

What would be the current directory if you issue this command at C:\Users\ITEfolder3?
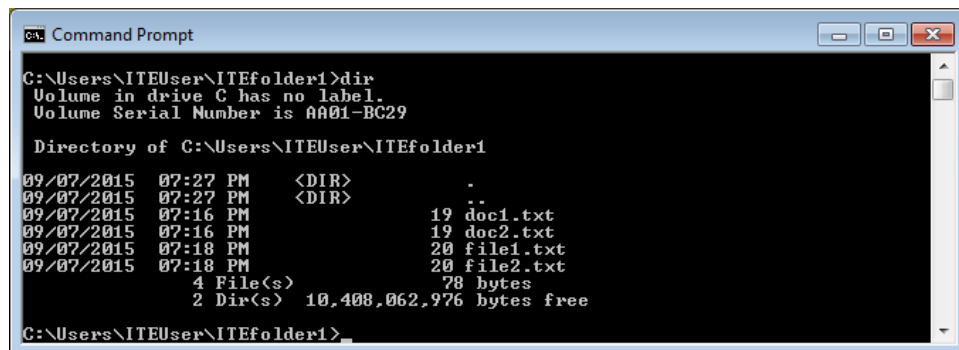
Step 4: Create text files.

a. Navigate to the **C:\Users\ITEUser\ITEfolder1** directory. Type **cd ITEfolder1** at the prompt.

b. Type **echo This is doc1.txt > doc1.txt** at the command prompt. The **echo** command is used to display a message at the command prompt. The **>** is used to redirect the message from the screen to a file. For example, in the first line, the message **This is doc1.txt** is redirected into a new file named **doc1.txt**. Use the **echo** command and **>** redirect to create these files: **doc2.txt**, **file1.txt**, and **file2.txt**.

```
Command Prompt

C:\Users\ITEUser\ITEfolder1>echo This is doc1.txt > doc1.txt

C:\Users\ITEUser\ITEfolder1>echo This is doc2.txt > doc2.txt

C:\Users\ITEUser\ITEfolder1>echo This is file1.txt > file1.txt

C:\Users\ITEUser\ITEfolder1>echo This is file2.txt > file2.txt

C:\Users\ITEUser\ITEfolder1>_
```

c. Use the **dir** command to verify the files are in the **ITEfolder1** folder.

```
Command Prompt

C:\Users\ITEUser\ITEfolder1>dir
 Volume in drive C has no label.
 Volume Serial Number is AA01-BC29

 Directory of C:\Users\ITEUser\ITEfolder1

09/07/2015  07:27 PM    <DIR>          .
09/07/2015  07:27 PM    <DIR>          ..
09/07/2015  07:16 PM                19 doc1.txt
09/07/2015  07:16 PM                19 doc2.txt
09/07/2015  07:18 PM                20 file1.txt
09/07/2015  07:18 PM                20 file2.txt
               4 File(s)             78 bytes
               2 Dir(s)  10,408,062,976 bytes free

C:\Users\ITEUser\ITEfolder1>_
```
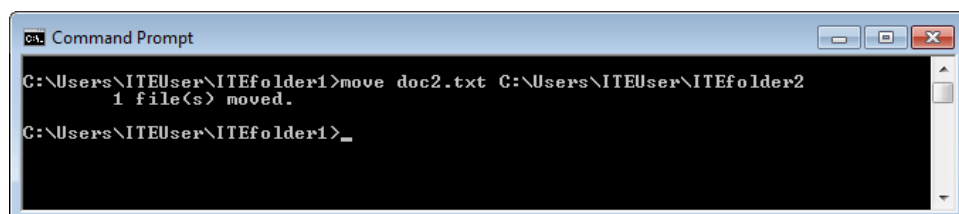
Step 5: Copy, delete, and move files.

a. At the command prompt, type **move doc2.txt C:\Users\ITEUser\ITEfolder2** to move the file **doc2.txt** to the **C:\Users\ITEUser\ITEfolder2** directory.
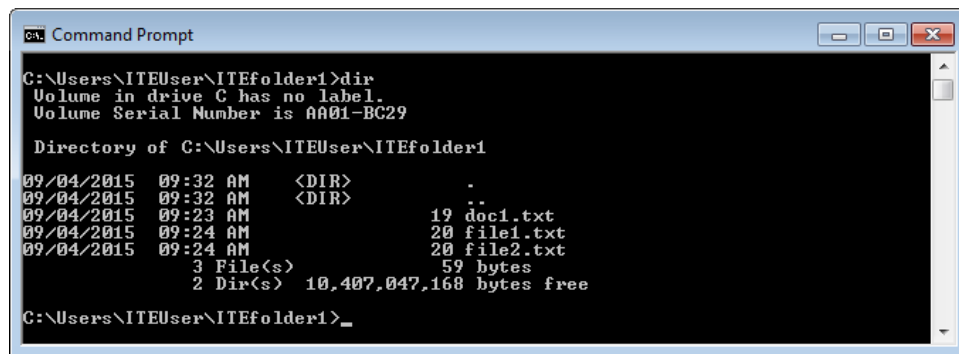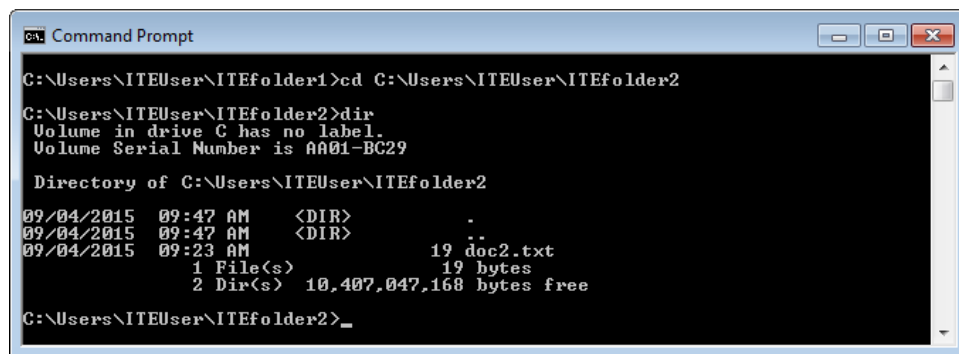
```
Command Prompt

C:\Users\ITEUser\ITEfolder1>move doc2.txt C:\Users\ITEUser\ITEfolder2
        1 file(s) moved.

C:\Users\ITEUser\ITEfolder1>_
```

b. Type **dir** at the prompt to verify that **doc2.txt** is no longer in the current directory.

c. Type **cd C:\Users\ITEUser\ITEfolder2** to change the directory to **ITEfolder2**. Type **dir** at the prompt to verify **doc2.txt** has been moved.
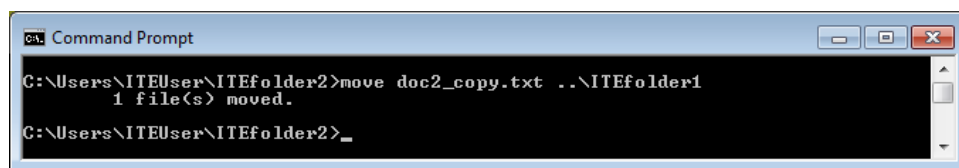

d. Type **copy doc2.txt doc2_copy.txt** to create a copy of **doc2.txt**. Type **dir** at the prompt to verify a copy of the file has been created.

e. Now use the **move** command to move **doc2_copy.txt** to **ITEfolder1**. Type **move doc2_copy.txt ..\ITEfolder1**.
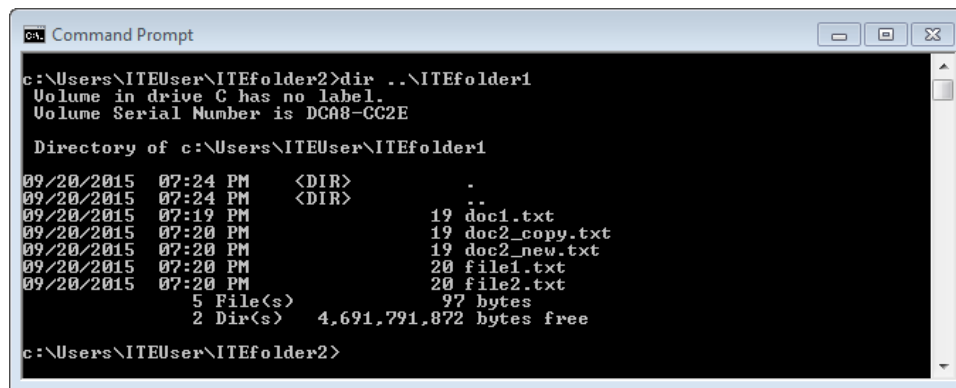

f. A copy of **doc2.txt** can be created and renamed with the **copy** command. Type **copy doc2.txt ..\ITEfoler1\doc2_new.txt** at the prompt.

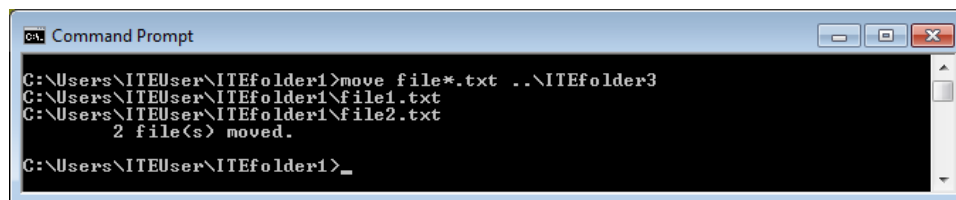g. Type **dir ..\ITEfolder1** to view the content in **ITEfolder1** without leaving the current directory.

h. Change the current directory to **ITEfolder1**. Type **cd ..\ITEfolder1** at the prompt.

i. Move **file1.txt** and **file2.txt** into **ITEfolder3**. To move all the files that contain the word **file** into **ITEfolder3** with one command, use a **wildcard** (*****) character to represent one or more characters. Type **move file*.txt ..\ITEfolder3**.
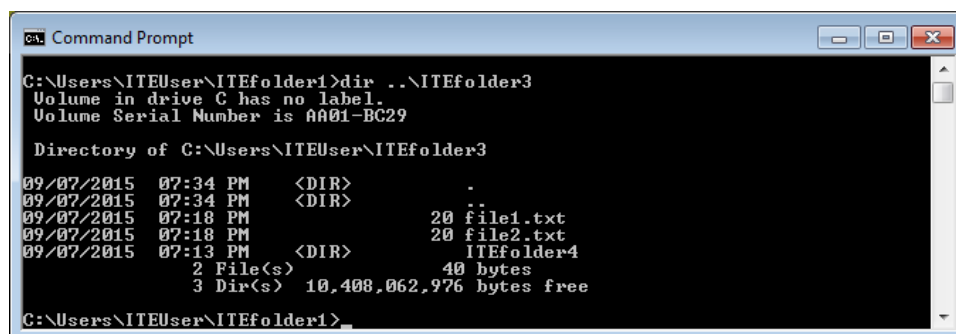
j. Now delete **doc2_copy.txt** from the **ITEfolder1** directory. Type **del doc2_copy.txt**. Use the **dir** command to verify the file deletion.

Step 6: Use the xcopy command.

In this step, the **xcopy** command is used to copy all the content in a directory and delete the empty directory.

a. Verify the content of ITEfolder3. Type **dir ..\ITEfolder3**.

b. Verify the content in **ITEfolder1**. Move all the files in this folder to ITEfolder2. Type **move doc*.txt ..\ITEfolder2** to move the files.

c. Type **xcopy ..\ITEfolder3 .** at the prompt to copy the content of **ITEfolder3** to **ITEfolder1**. Note the **.** at the end of the command. It is a shortcut for the current directory.

```
Command Prompt                                                    _ □ ▨

C:\Users\ITEUser\ITEfolder1>xcopy ..\ITEfolder3 .
..\ITEfolder3\file1.txt
..\ITEfolder3\file2.txt
2 File(s) copied

C:\Users\ITEUser\ITEfolder1>_
```

d. At the prompt, type **dir** to display the content of **ITEfolder1**. Only the files in the **ITEfolder3** were copied into **ITEfolder1**. The directory **ITEfolder4** was not copied into **ITEfolder3**.

```
Command Prompt                                                    _ □ ▨

C:\Users\ITEUser\ITEfolder1>dir
 Volume in drive C has no label.
 Volume Serial Number is AA01-BC29

 Directory of C:\Users\ITEUser\ITEfolder1

09/07/2015  08:19 PM    <DIR>          .
09/07/2015  08:19 PM    <DIR>          ..
09/07/2015  07:18 PM                20 file1.txt
09/07/2015  07:18 PM                20 file2.txt
               2 File(s)             40 bytes
               2 Dir(s)  10,408,062,976 bytes free

C:\Users\ITEUser\ITEfolder1>_
```
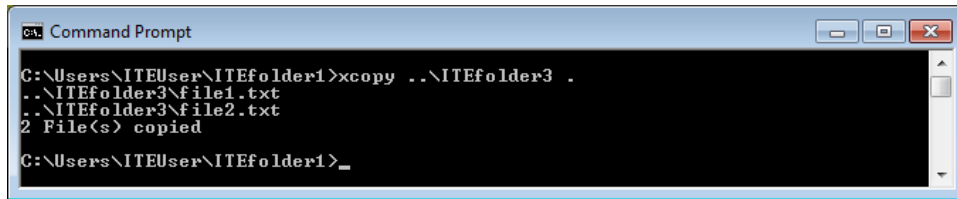
e. Use **help xcopy** to determine which switch would allow the **xcopy** command to copy **all** the files and directories.

f. Because **ITEfolder4** is an empty folder, **/E** is needed to copy all the content of **ITEfolder3** and the empty subfolder.

Type **xcopy /E ..\ITEfolder3 .** at the prompt to copy the files. When prompted, type **a** to allow overwriting the existing files.

```
Command Prompt                                                    _ □ ▨

C:\Users\ITEUser\ITEfolder1>xcopy /E ..\ITEfolder3 .
Overwrite C:\Users\ITEUser\ITEfolder1\file1.txt (Yes/No/All)? a
..\ITEfolder3\file1.txt
..\ITEfolder3\file2.txt
2 File(s) copied

C:\Users\ITEUser\ITEfolder1>_
```

g. Verify the **ITEfolder4** was also copied in **ITEfolder1**.

```
Command Prompt                                                    _ □ ▨

C:\Users\ITEUser\ITEfolder1>dir
 Volume in drive C has no label.
 Volume Serial Number is AA01-BC29

 Directory of C:\Users\ITEUser\ITEfolder1

09/07/2015  08:20 PM    <DIR>          .
09/07/2015  08:20 PM    <DIR>          ..
09/07/2015  07:18 PM                20 file1.txt
09/07/2015  07:18 PM                20 file2.txt
09/07/2015  08:15 PM    <DIR>          ITEfolder4
               2 File(s)             40 bytes
               3 Dir(s)  10,408,062,976 bytes free

C:\Users\ITEUser\ITEfolder1>_
```
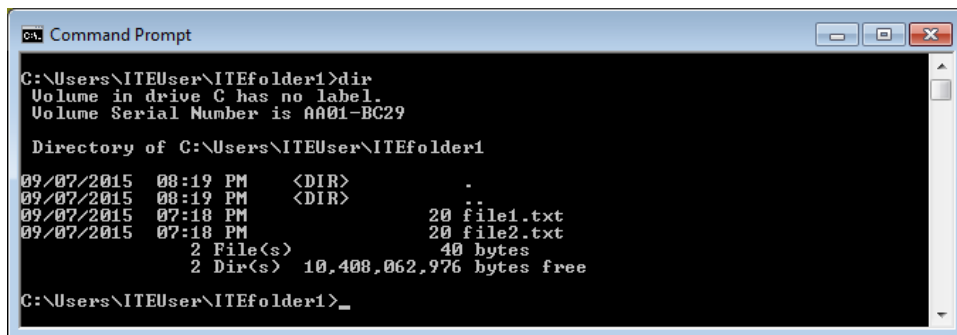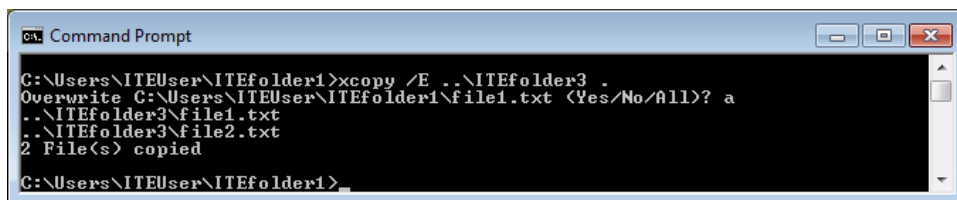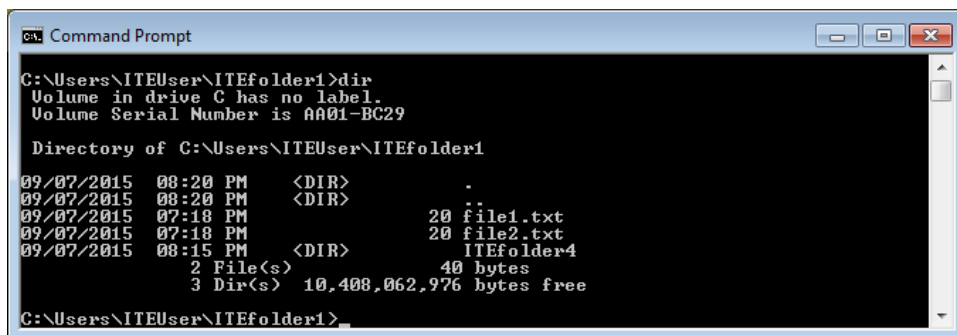
Step 7: Delete directories.

In this step, you will delete an empty and a non-empty directory using the **rd** command.

a. Navigate to the **C:\Users\ITEUser\ITEfolder3** directory.

b. Use the **rd ITEfolder4** to delete the empty directory. Verify the directory removal using the **dir** command.

```
Command Prompt

C:\Users\ITEUser\ITEfolder3>rd ITEfolder4

C:\Users\ITEUser\ITEfolder3>dir
 Volume in drive C has no label.
 Volume Serial Number is AA01-BC29

 Directory of C:\Users\ITEUser\ITEfolder3

09/07/2015  08:25 PM    <DIR>          .
09/07/2015  08:25 PM    <DIR>          ..
09/07/2015  07:18 PM                20 file1.txt
09/07/2015  07:18 PM                20 file2.txt
               2 File(s)             40 bytes
               2 Dir(s)  10,408,062,976 bytes free

C:\Users\ITEUser\ITEfolder3>_
```
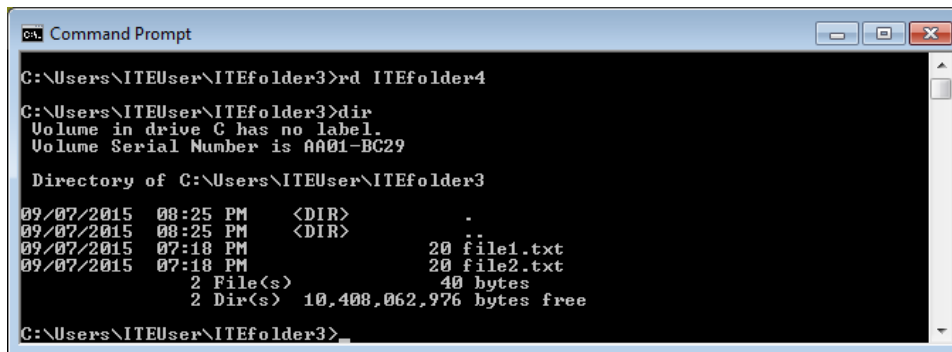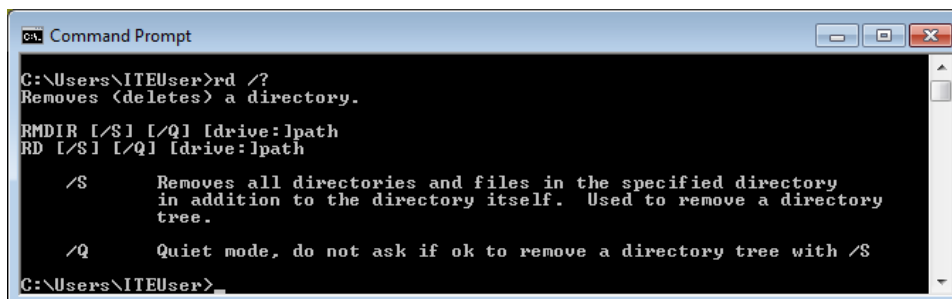
c. Navigate to **C:\Users\ITEUser** folder.

d. Use the **rd ITEfolder2** to delete the non-empty directory. The message indicates that the directory is not empty and cannot be deleted.

```
Command Prompt

C:\Users\ITEUser>rd ITEfolder2
The directory is not empty.

C:\Users\ITEUser>_
```

e. Use **rd /?** command to determine the switch that allows the deletion of a non-empty directory.

```
Command Prompt

C:\Users\ITEUser>rd /?
Removes (deletes) a directory.

RMDIR [/S] [/Q] [drive:]path
RD [/S] [/Q] [drive:]path

    /S      Removes all directories and files in the specified directory
            in addition to the directory itself.  Used to remove a directory
            tree.

    /Q      Quiet mode, do not ask if ok to remove a directory tree with /S

C:\Users\ITEUser>_
```

f. Type **rd /S ITEfolder2** to delete this folder. When prompted, type **y** to delete the directory. Use **dir** to verify that **ITEfolder2** was deleted.

```
Command Prompt

C:\Users\ITEUser>rd /S ITEfolder2
ITEfolder2, Are you sure (Y/N)? y

C:\Users\ITEUser>_
```

g. Type **exit** to close the command prompt window.

Reflection

What are the advantages of using CLI vs. GUI?