PRACTICAL - 1

John has recently started a new job as system administrator in MNC. He is dealing with computers having different operating systems such as Windows, LINUX and UNIX. How will he be able to interact with the system by using different operating system commands for the following operation?

Que.1. Display the user manual of any command that we can run on the terminal.

```
FINDSTR      Searches for strings in files.
FOR          Runs a specified command for each file in a set of files.
FORMAT       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
             a batch program.
GPRESULT     Displays Group Policy information for machine or user.
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.
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.
OPENFILES    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.
```

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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           Starts a separate window to run a specified program or command.
SUBST           Associates a path with a drive letter.
SYSTEMINFO      Displays machine specific properties and configuration.
TASKLIST        Displays all currently running tasks including services.
TASKKILL        Kill or stop a running process or application.
TIME            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
                path.
TYPE            Displays the contents of a text file.
VER             Displays the Windows version.
VERIFY          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.

For more information on tools see the command-line reference in the online help.

C:\Users\ASUS>
```

2. Change the current working directory of the user

```
Microsoft Windows [Version 10.0.26200.7462]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ASUS>cd Downloads

C:\Users\ASUS\Downloads>
```

3. Lists all the contents in the current working directory

```
Microsoft Windows [Version 10.0.26200.7462]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ASUS>cd Downloads

C:\Users\ASUS\Downloads>dir
 Volume in drive C is OS
 Volume Serial Number is 60EB-3DFE

 Directory of C:\Users\ASUS\Downloads

01/12/2026  02:17 PM    <DIR>          .
07/22/2025  07:13 PM    <DIR>          ..
09/09/2025  11:33 PM            54,067 #GoVote art by Eric Comstock  #Vote #Vota #Civics….jpg
10/02/2025  01:15 PM        24,034,319 -Biomass-Energy Final.pptx
10/02/2025  01:15 PM        24,034,319 -Biomass-Energy.pptx
06/18/2025  07:31 PM            95,866 1.jpg
06/06/2025  02:50 PM           480,757 10.jpg
05/08/2025  07:42 PM            18,360 10watch.html
06/06/2025  02:50 PM           393,861 11.jpg
06/06/2025  02:50 PM           435,861 12.jpg
06/06/2025  02:51 PM           446,663 13.jpg
06/06/2025  02:51 PM           543,367 14.jpg
06/06/2025  02:51 PM           478,907 15.jpg
06/06/2025  02:51 PM           321,887 16.jpg
06/06/2025  02:52 PM           400,415 17.jpg
06/06/2025  02:52 PM           502,025 18.jpg
06/06/2025  02:52 PM           309,606 19.jpg
06/02/2025  04:08 PM           149,154 1st cae.jpg
05/13/2025  07:36 PM        36,387,559 1st sem endsem .pdf
06/06/2025  02:48 PM           150,105 2.jpg
06/06/2025  02:53 PM           481,228 20.jpg
10/23/2024  03:07 PM            80,949 2faf1eeffca564bce630498eebe0a489.jpg
07/12/2025  05:37 PM           443,214 3 sem section B_TT.pdf
06/06/2025  02:49 PM           133,354 3.jpg
07/31/2025  09:39 PM           485,594 3358359.jpg
10/23/2024  03:07 PM           103,318 389865cb04d5d3a87ff22d2f2f979320.jpg
09/08/2025  09:02 PM        13,683,374 3rd sem .pdf
```

# 4. Read, modify or concatenate text files

- Read a text file:
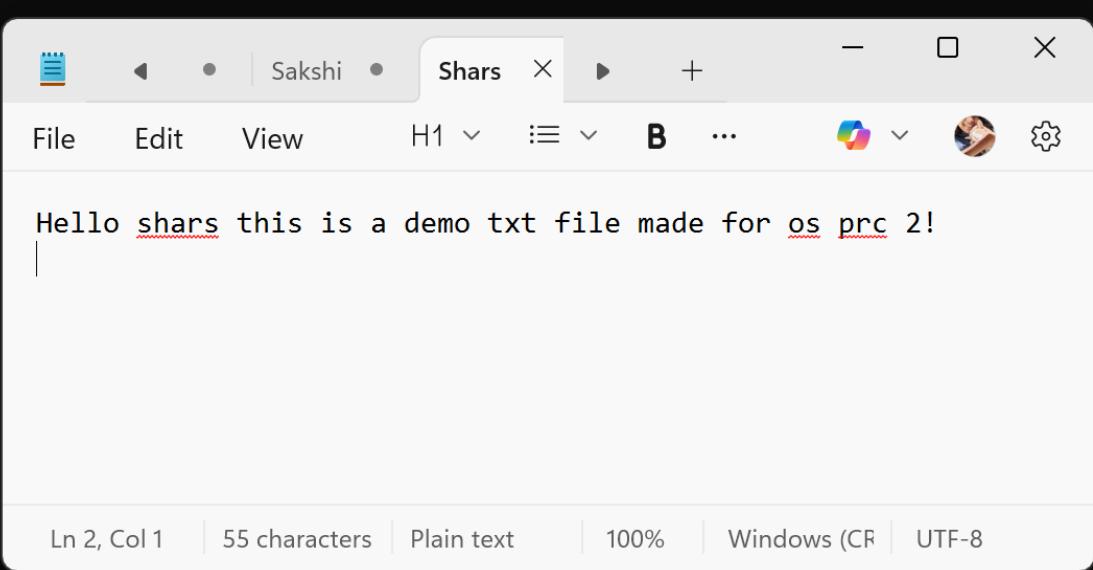
```
C:\Users\ASUS\Downloads>type Shars.txt.txt
Hello shars this is a demo txt file made for os prc 2!

C:\Users\ASUS\Downloads>
```

- Modify a text file:

```
C:\Users\ASUS\Downloads>notepad Shars.txt.txt

C:\Users\ASUS\Downloads>
```
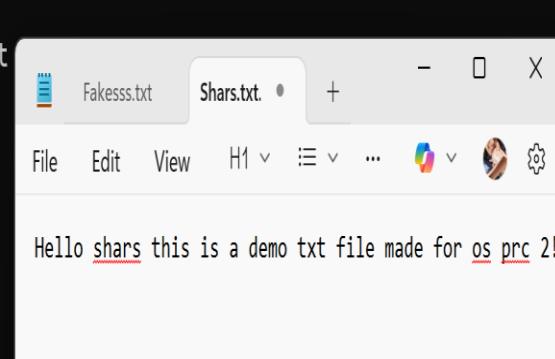

Sakshi · Shars × +

File   Edit   View   H1 ∨   ☰ ∨   B   ⋯

Hello shars this is a demo txt file made for os prc 2!

Ln 2, Col 1 | 55 characters | Plain text | 100% | Windows (CR | UTF-8

- Concatenate text files:
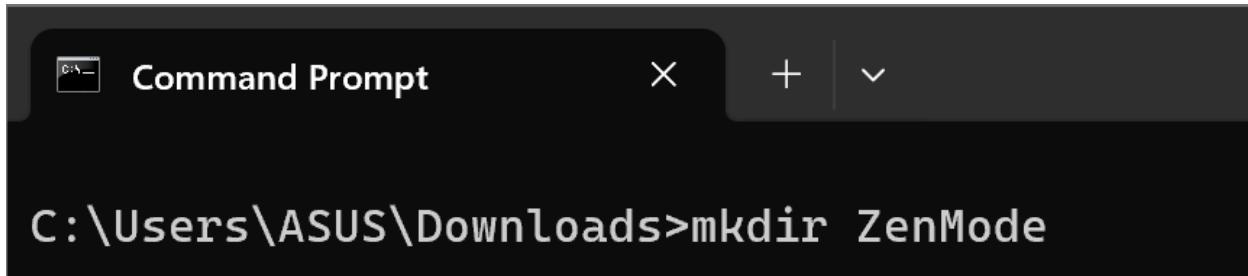
```
C:\Users\ASUS\Downloads>Shars.txt.txt Fakesss.txt > Neww.txt

C:\Users\ASUS\Downloads>
```


Fakesss.txt   Shars.txt. ●   +

File   Edit   View   H1 ∨   ☰ ∨   ⋯

Hello shars this is a demo txt file made for os prc 2!

5. Create a new directory under any directory
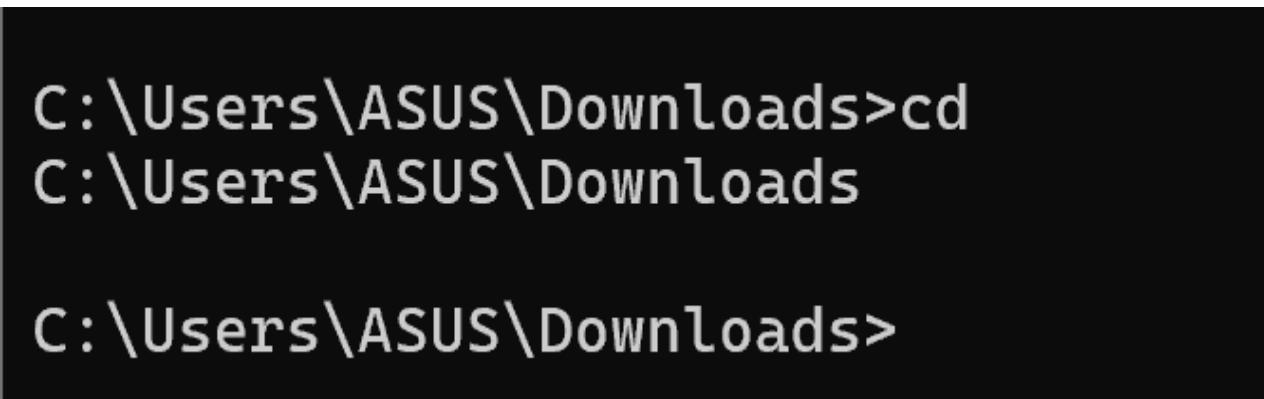
```
Command Prompt          ✕     +   ∨

C:\Users\ASUS\Downloads>mkdir ZenMode
```

```
8.jpg
01/12/2026  08:23 PM    <DIR>          ZenMode
09/09/2025  11:43 PM            168,819 司法正義 justice no_11348.jpg
          750 File(s)  4,197,355,074 bytes
            8 Dir(s)  590,164,377,600 bytes free

C:\Users\ASUS\Downloads>
```
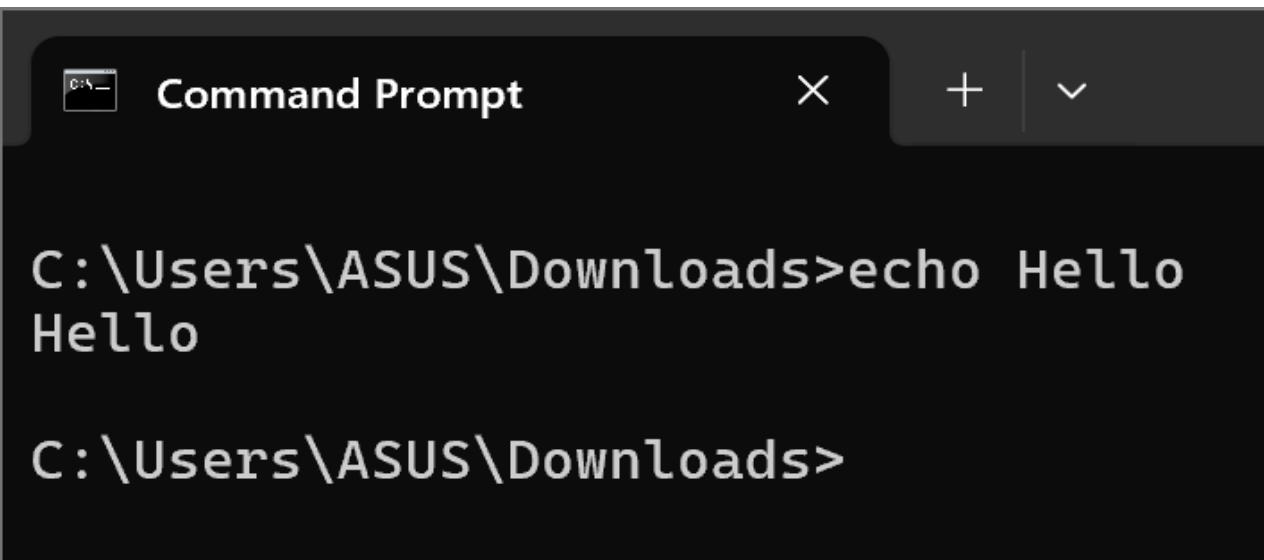
6. Display the current working directory of the terminal

```
C:\Users\ASUS\Downloads>cd
C:\Users\ASUS\Downloads


C:\Users\ASUS\Downloads>
```

7. Write its arguments to standard output

```
Command Prompt          ✕     +   ∨


C:\Users\ASUS\Downloads>echo Hello
Hello

C:\Users\ASUS\Downloads>
```

```
Command Prompt                                        ☐  ☐  ✕

C:\Users\ASUS\Downloads>runas /user:administrator cmd
Enter the password for administrator:
Attempting to start cmd as user "SHARSPC\administrator" ...
RUNAS ERROR: Unable to run - cmd
1326: The user name or password is incorrect.

C:\Users\ASUS\Downloads>
```

9. Delete a directory

```
C:\Users\ASUS\Downloads>rmdir dream

C:\Users\ASUS\Downloads>
```

10. Copy a file or directory

```
C:\Users\ASUS\Downloads>xcopy ZenMode D:\Backup\ZenMode /E
Does D:\Backup\ZenMode specify a file name
or directory name on the target
(F = file, D = directory)? D
0 File(s) copied
```

11.Switch to root-user

```
Command Prompt                                        ☐  ☐  ✕

C:\Users\ASUS\Downloads>runas /user:administrator cmd
Enter the password for administrator:
Attempting to start cmd as user "SHARSPC\administrator" ...
RUNAS ERROR: Unable to run - cmd
1326: The user name or password is incorrect.

C:\Users\ASUS\Downloads>
```

12. Moves files and directories from one directory to another

```
C:\Users\ASUS\Downloads>move Shars.txt.txt D:\Documents\
        1 file(s) moved.

C:\Users\ASUS\Downloads>
```

13. Search for a particular string/word in a text file

```
C:\Users\ASUS\Downloads>
C:\Users\ASUS\Downloads>find "Hello" Fakesss.txt

---------- FAKESSS.TXT

C:\Users\ASUS\Downloads>
```

14.Print the top N number of data of the given input

```
C:\Users\ASUS\Downloads>more Fakesss.txt
A significant percentage of reviews are fake, paid, or bot-generated

Users blindly trust star ratings

Honest businesses suffer because of fake downvotes

No India-focused fake-review detection tool exists

C:\Users\ASUS\Downloads>
```

15. Print the last N number of data of the given input

```
C:\Users\ASUS\Downloads>more Fakesss.txt
A significant percentage of reviews are fake, paid, or bot-generated

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No India-focused fake-review detection tool exists

C:\Users\ASUS\Downloads>
```

16. Remove read permission from owner of the file

```
C:\Users\ASUS\Downloads>attrib -r Fakesss.txt

C:\Users\ASUS\Downloads>
```

17. Add read permission to owner plus re move write permission and add write permission to group

```
C:\Users\ASUS\Downloads>icacls ZenMode /grant:r SharsPC:R /deny SharsPC:
W /grant Users:W
processed file: ZenMode
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\Downloads>
```

18. Add write permission to owner no permission to others

```
C:\Users\ASUS\Downloads>icacls ZenMode /grant SharsPC:W /inheritance:r /
remove Users
processed file: ZenMode
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\Downloads>
```

19. Assign permission to users

```
C:\Users\ASUS\Downloads> icacls ZenMode /grant Users:F
processed file: ZenMode
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\Downloads>
```
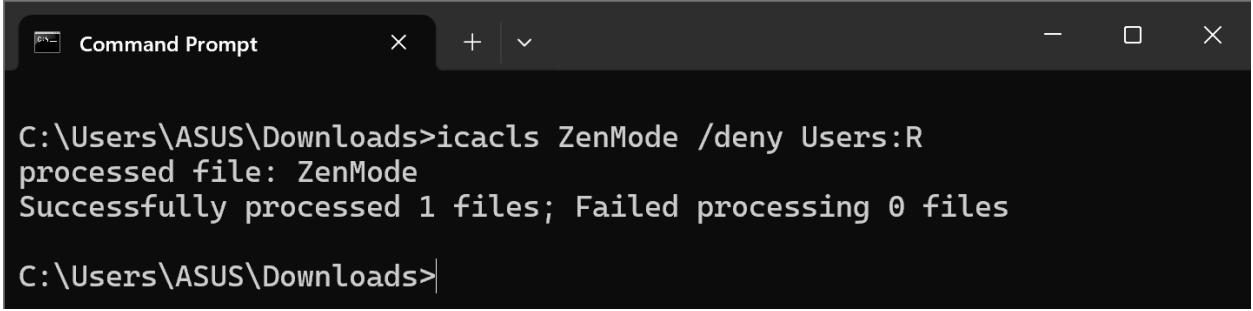
20. Assign R/W/X to others

```
C:\Users\ASUS\Downloads>icacls ZenMode /grant Users:F
processed file: ZenMode
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\Downloads>
```

21. Remove all permission from all users
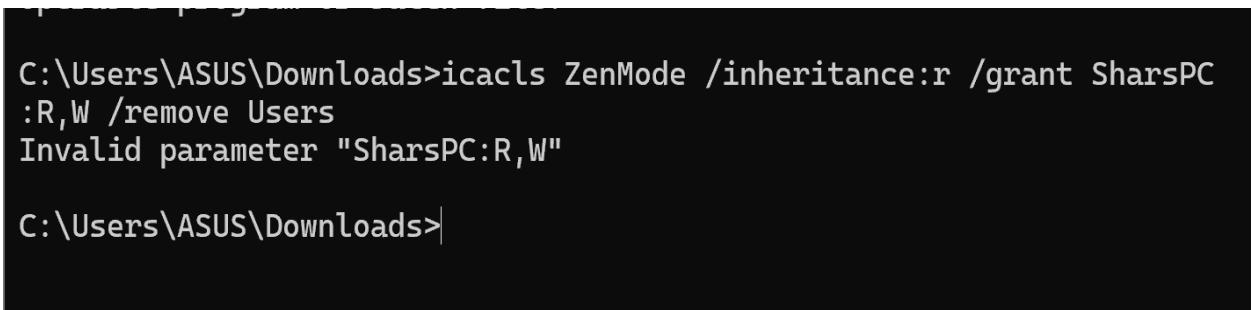
```
C:\Users\ASUS\Downloads>icacls ZenMode /inheritance:r /remove Users
/remove SharsPC
processed file: ZenMode
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\Downloads>
```

22. Remove read permission from user using absolute mode
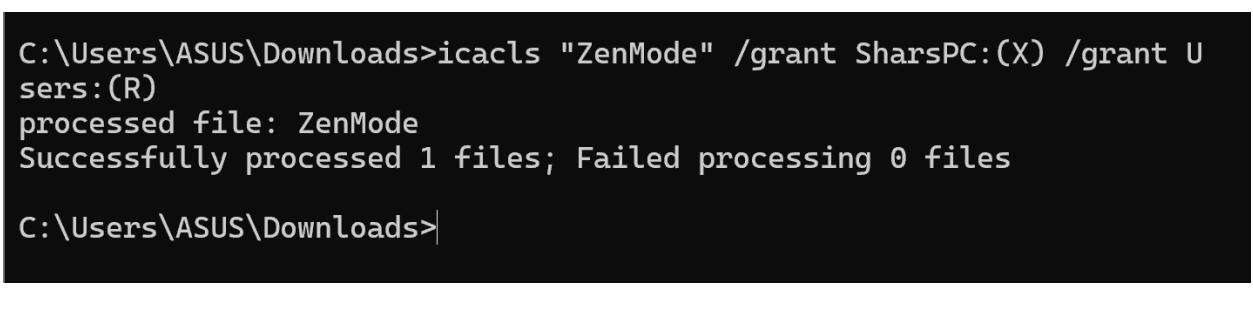
```
Command Prompt          ×    +  ∨                        —  □  ×

C:\Users\ASUS\Downloads>icacls ZenMode /deny Users:R
processed file: ZenMode
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\Downloads>
```

23. Add R/w permission to owner no permission to group and no permission to other using absolute mode

```
C:\Users\ASUS\Downloads>icacls ZenMode /inheritance:r /grant SharsPC
:R,W /remove Users
Invalid parameter "SharsPC:R,W"

C:\Users\ASUS\Downloads>
```

24. Add execute permission to owner, read permission to group and other

```
C:\Users\ASUS\Downloads>icacls "ZenMode" /grant SharsPC:(X) /grant U
sers:(R)
processed file: ZenMode
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\Downloads>
```

25. Add execute permission to all user

```
C:\Users\ASUS\Downloads> icacls ZenMode /grant Users:(X)
processed file: ZenMode
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\Downloads>
```