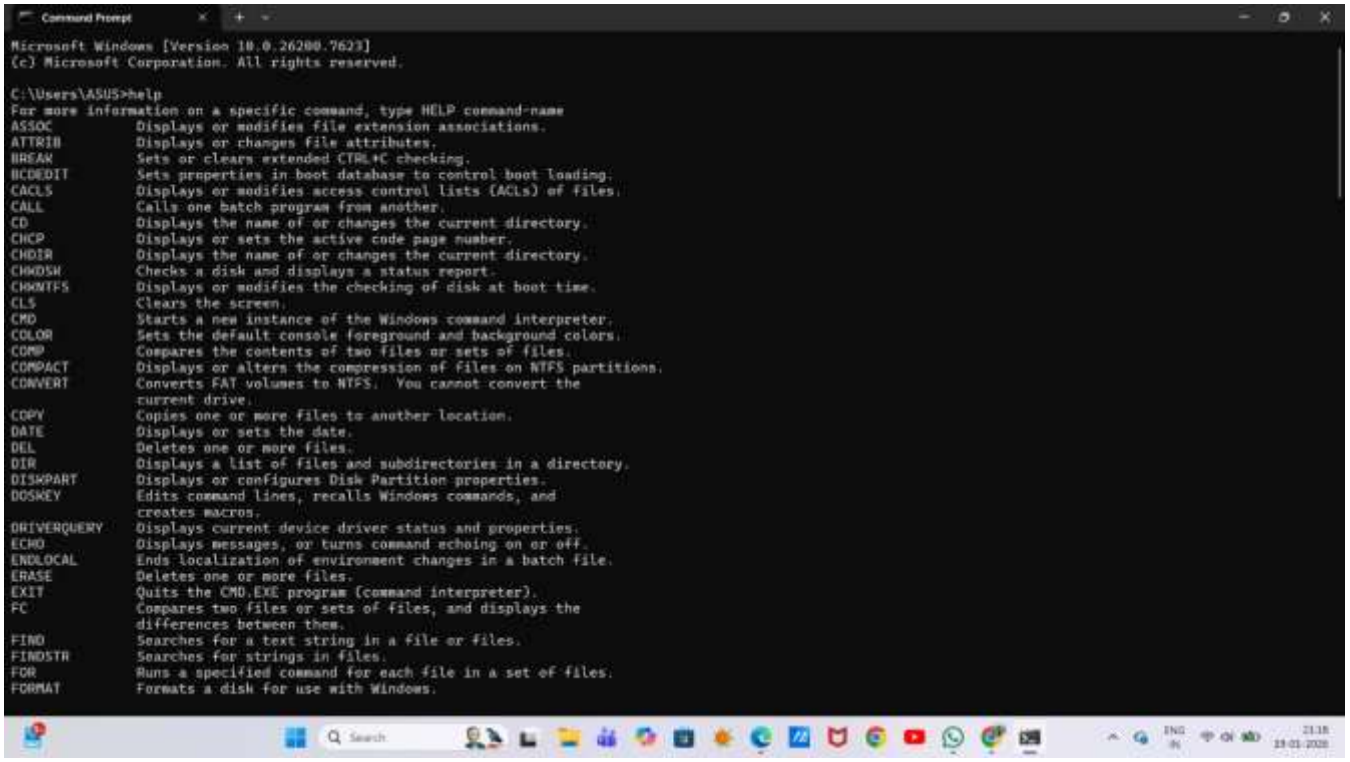
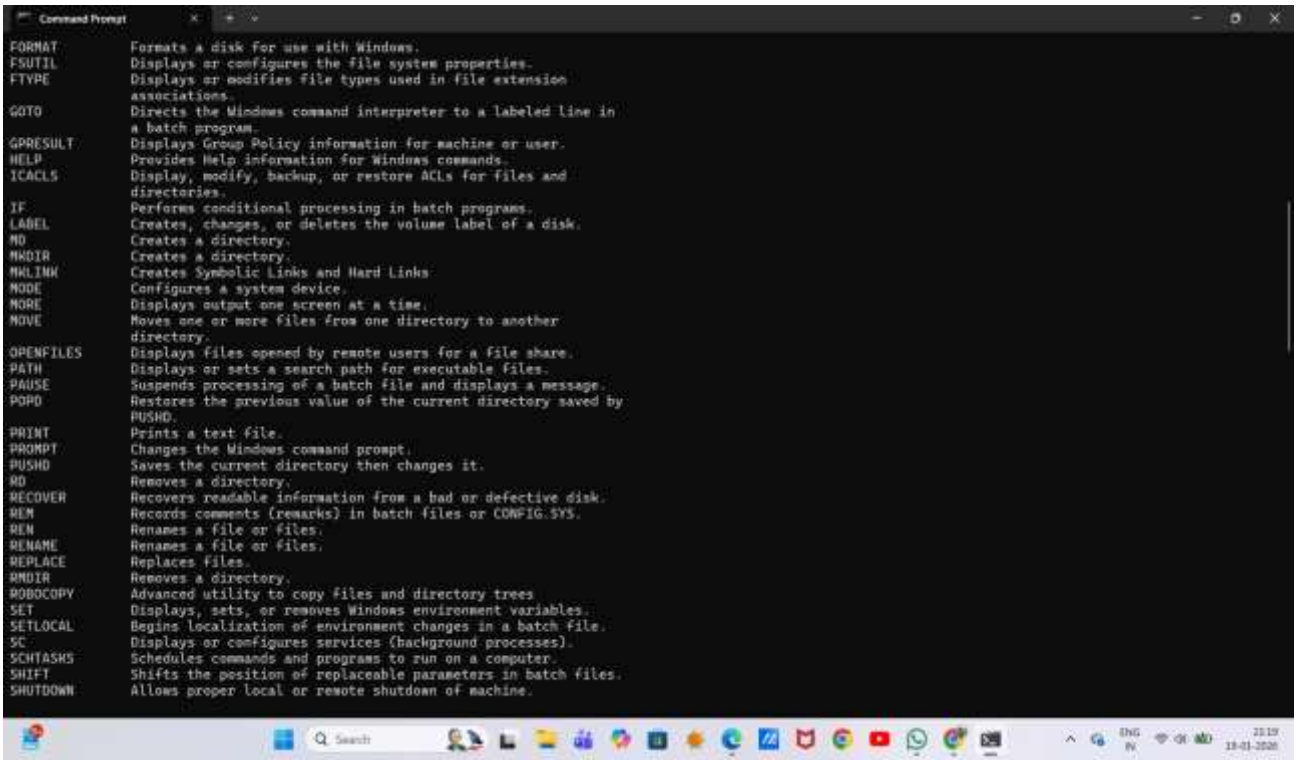
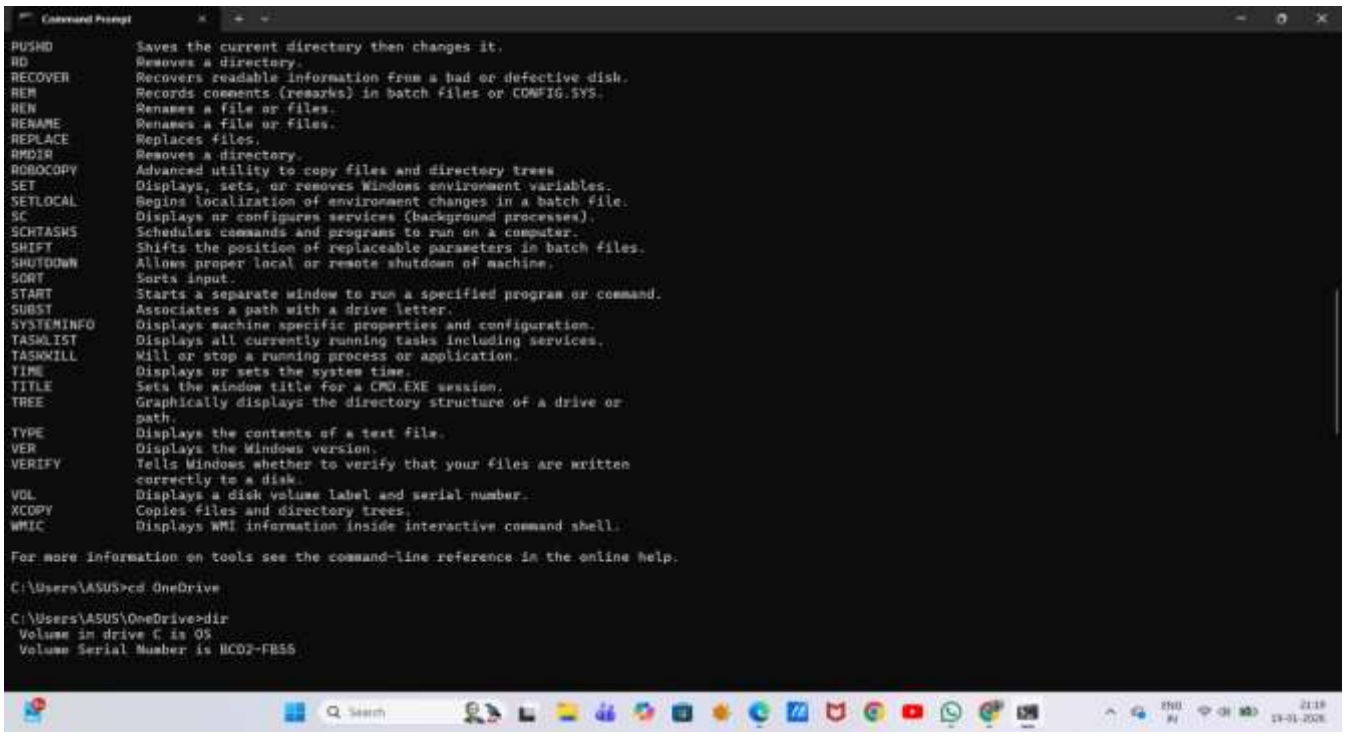
OS_PRACTICAL 1 : (CD24038)

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.




Command Prompt
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.
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.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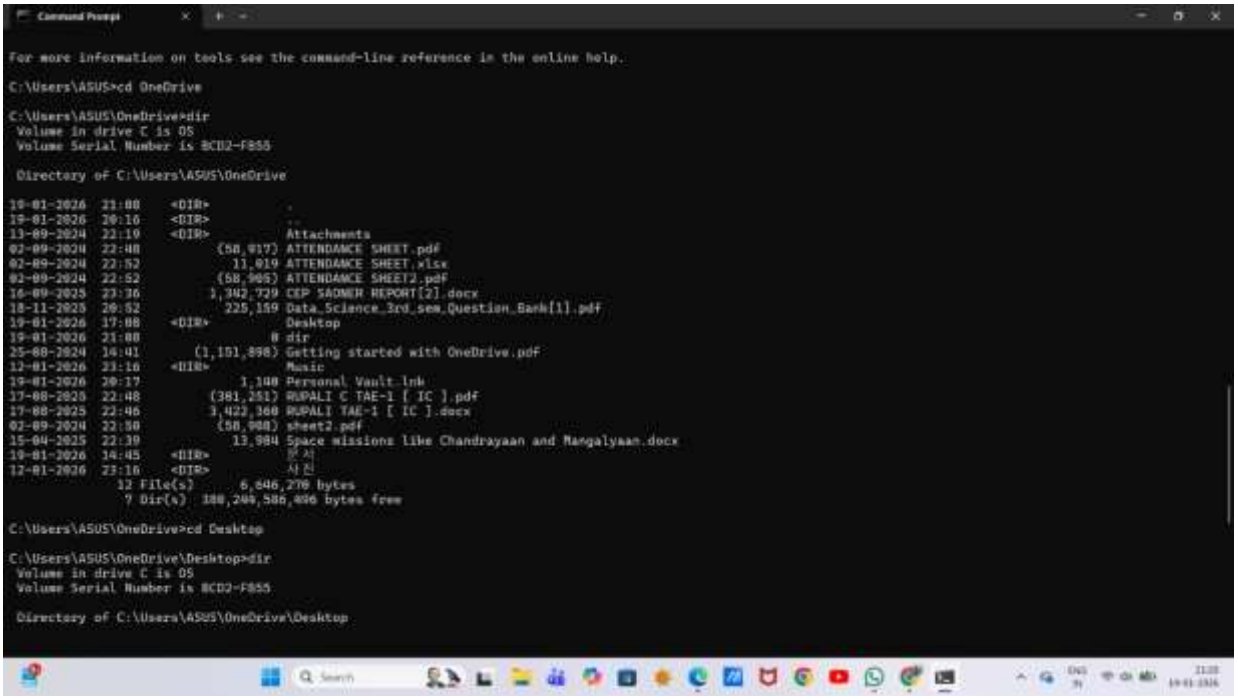
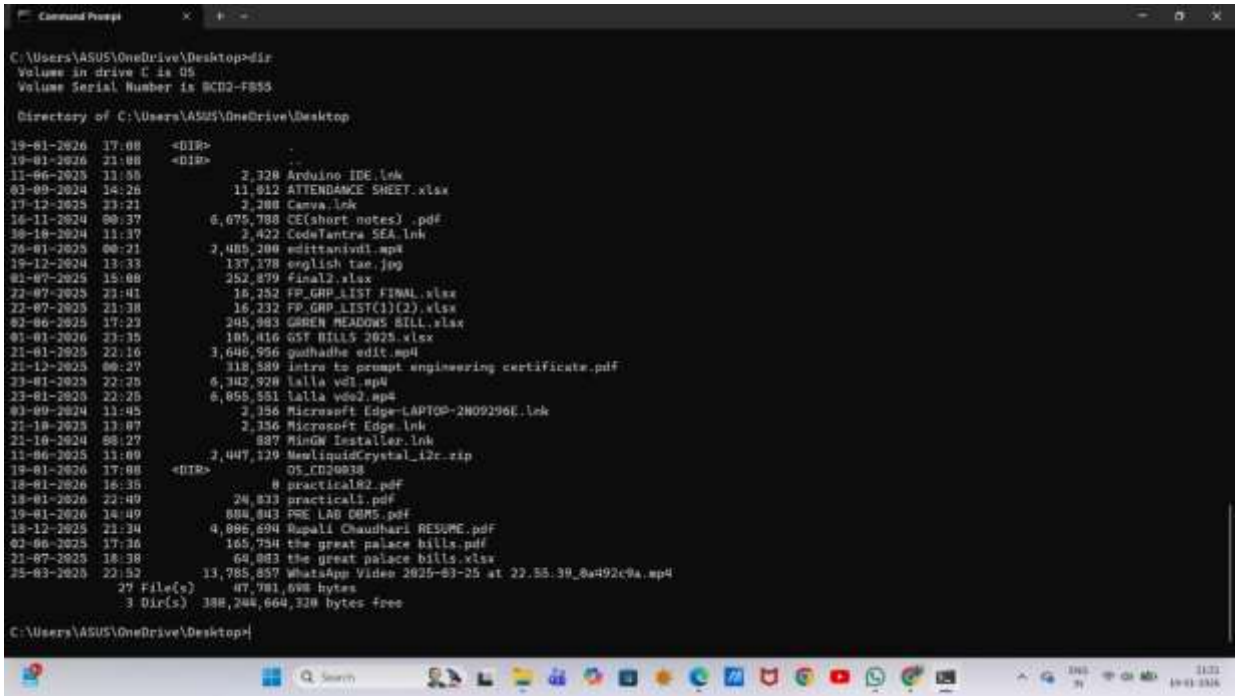
SHUTDOWN Allows proper local or remote shutdown of machine.
SORT Sorts input.
START Starts a separate window to run a specified program or command.
SUBST Associates a path with a drive letter.
SYSTEMINFO Displays machine specific properties and configuration.
TASKLIST Displays all currently running tasks 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>cd OneDrive
C:\Users\ASUS\OneDrive>dir
Volume in drive C is OS
Volume Serial Number is 8CD2-FB55

2. Change the current working directory of the user :



3. Lists all the contents in the current working directory



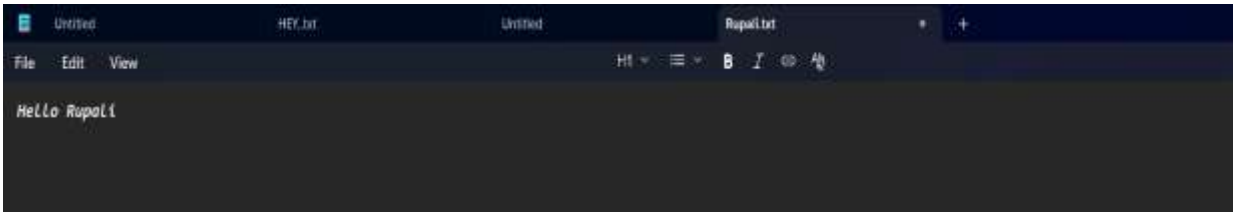
4. Read, modify or concatenate text files:

- Read a text file:

```
C:\Users\ASUS\OneDrive\Desktop>echo hello Rupali > Rupali.txt.txt

C:\Users\ASUS\OneDrive\Desktop>type Rupali.txt.txt
hello Rupali
```

- Modify a text file & Concatenate text files:



5. Create a new directory under any directory

```
C:\Users\ASUS\OneDrive\Desktop>mkdir Practical

C:\Users\ASUS\OneDrive\Desktop>md Practical
A subdirectory or file Practical already exists.
```

6. Display the current working directory of the terminal

```
C:\Users\91942\OneDrive\Desktop>cd
C:\Users\91942\OneDrive\Desktop

C:\Users\91942\OneDrive\Desktop>
```

7. Write its arguments to standard output

```
C:\Users\91942\OneDrive\Desktop>echo Practical Os
Practical Os

C:\Users\91942\OneDrive\Desktop>
```

8. Remove a file.

```
C:\Users\ASUS\OneDrive\Desktop>del Rupali.txt

C:\Users\ASUS\OneDrive\Desktop>
```

9. Delete a directory

```
C:\Users\ASUS\OneDrive\Desktop>del Rupali.txt

C:\Users\ASUS\OneDrive\Desktop>
```

10. Copy a file or directory

```
C:\Users\ASUS\OneDrive\Desktop>copy Rupali.txt.txt Rupali.txt
        1 file(s) copied.

C:\Users\ASUS\OneDrive\Desktop>
```

11. Switch to root-user

```
Command Prompt

C:\Users\ASUS\OneDrive\Desktop>runas
RUNAS USAGE:

RUNAS [ [/noprofile | /profile] [/env] [/savecred | /netonly] ]
       /user:<UserName> program

RUNAS [ [/noprofile | /profile] [/env] [/savecred] ]
       /smartcard [/user:<UserName>] program

RUNAS [ [/machine:<MachineType>] ] /trustlevel:<TrustLevel> program

   /noprofile        specifies that the user's profile should not be loaded.
                     This causes the application to load more quickly, but
                     can cause some applications to malfunction.
   /profile          specifies that the user's profile should be loaded.
                     This is the default.
   /env              to use current environment instead of user's.
   /netonly          use if the credentials specified are for remote
                     access only.
   /savecred         to use credentials previously saved by the user.
   /smartcard        use if the credentials are to be supplied from a
                     smartcard.
   /user             <UserName> should be in form USER@DOMAIN or DOMAIN\USER
   /showtrustlevels  displays the trust levels that can be used as arguments
                     to /trustlevel.
   /trustlevel       <Level> should be one of levels enumerated
                     in /showtrustlevels.
   /machine          specifies the machine architecture of the process.
                     <MachineType> should be one of x86|amd64|arm|arm64.
   program           command line for EXE.  See below for examples

Examples:
> runas /noprofile /user:mymachine\administrator cmd
> runas /profile /env /user:mydomain\admin "mmc %windir%\system32\dsa.msc"
> runas /env /user:user@domain.microsoft.com "notepad \"my file.txt\""

NOTE:  Enter user's password only when prompted.
NOTE:  /profile is not compatible with /netonly.
NOTE:  /savecred is not compatible with /smartcard.
```

12. Moves files and directories from one directory to another

```
C:\Users\91942\OneDrive\Desktop>move Palak.txt.txt D:\Downloads
        1 file(s) moved.

C:\Users\91942\OneDrive\Desktop>
```

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

```
C:\Users\ASUS\OneDrive\Desktop>find "rupali" Rupali.txt

---------- RUPALI.TXT

C:\Users\ASUS\OneDrive\Desktop>
```

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

```
C:\Users\ASUS\OneDrive\Desktop>more Rupali.txt
Apple
Orange
Banana
Cherry
Grapes

C:\Users\ASUS\OneDrive\Desktop>
```

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

```
C:\Users\ASUS\OneDrive\Desktop>type Rupali.txt
Apple
Orange
Banana
Cherry
Grapes

C:\Users\ASUS\OneDrive\Desktop>
```

16. Remove read permission from owner of the file

```
C:\Users\ASUS\OneDrive\Desktop>icacls Rupali.txt /deny "ASUS":R
processed file: Rupali.txt
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\OneDrive\Desktop>
```

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

```
C:\Users\ASUS\OneDrive\Desktop>icacls Rupali.txt /deny "ASUS":R
processed file: Rupali.txt
Successfully processed 1 files; Failed processing 0 files
```

18. Add write permission to owner no permission to others

```
C:\Users\ASUS\OneDrive\Desktop>icacls Rupali.txt /grant "ASUS":W
processed file: Rupali.txt
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\OneDrive\Desktop>
```

19. Assign permission to users

```
C:\Users\ASUS\OneDrive\Desktop>icacls Rupali.txt /grant "ASUS:F
processed file: Rupali.txt
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\OneDrive\Desktop>
```

20. Assign R/W/X to others

```
C:\Users\ASUS\OneDrive\Desktop>icacls Rupali.txt /grant "ASUS:F
processed file: Rupali.txt
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\OneDrive\Desktop>
```

21. Remove all permission from all users

```
C:\Users\ASUS\OneDrive\Desktop>icacls Rupali.txt /remove Everyone
processed file: Rupali.txt
Successfully processed 1 files; Failed processing 0 files
```

22. Remove read permission from user using absolute mode

```
C:\Users\ASUS\OneDrive\Desktop>icacls Rupali.txt /deny "ASUS":R
processed file: Rupali.txt
Successfully processed 1 files; Failed processing 0 files
```

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

```
C:\Users\ASUS\OneDrive\Desktop>icacls Rupali.txt /grant "ASUS":RW
processed file: Rupali.txt
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\OneDrive\Desktop>icacls Rupali.txt /remove Everyone
processed file: Rupali.txt
Successfully processed 1 files; Failed processing 0 files

C:\Users\ASUS\OneDrive\Desktop>
```

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

```
C:\Users\ASUS\OneDrive\Desktop>icacls Rupali.txt /grant "ASUS":RX Everyone:R
processed file: Rupali.txt
Successfully processed 1 files; Failed processing 0 files
```

25. Add execute permission to all user

```
C:\Users\ASUS\OneDrive\Desktop>icacls Rupali.txt /grant Everyone:RX
processed file: Rupali.txt
Successfully processed 1 files; Failed processing 0 files
```