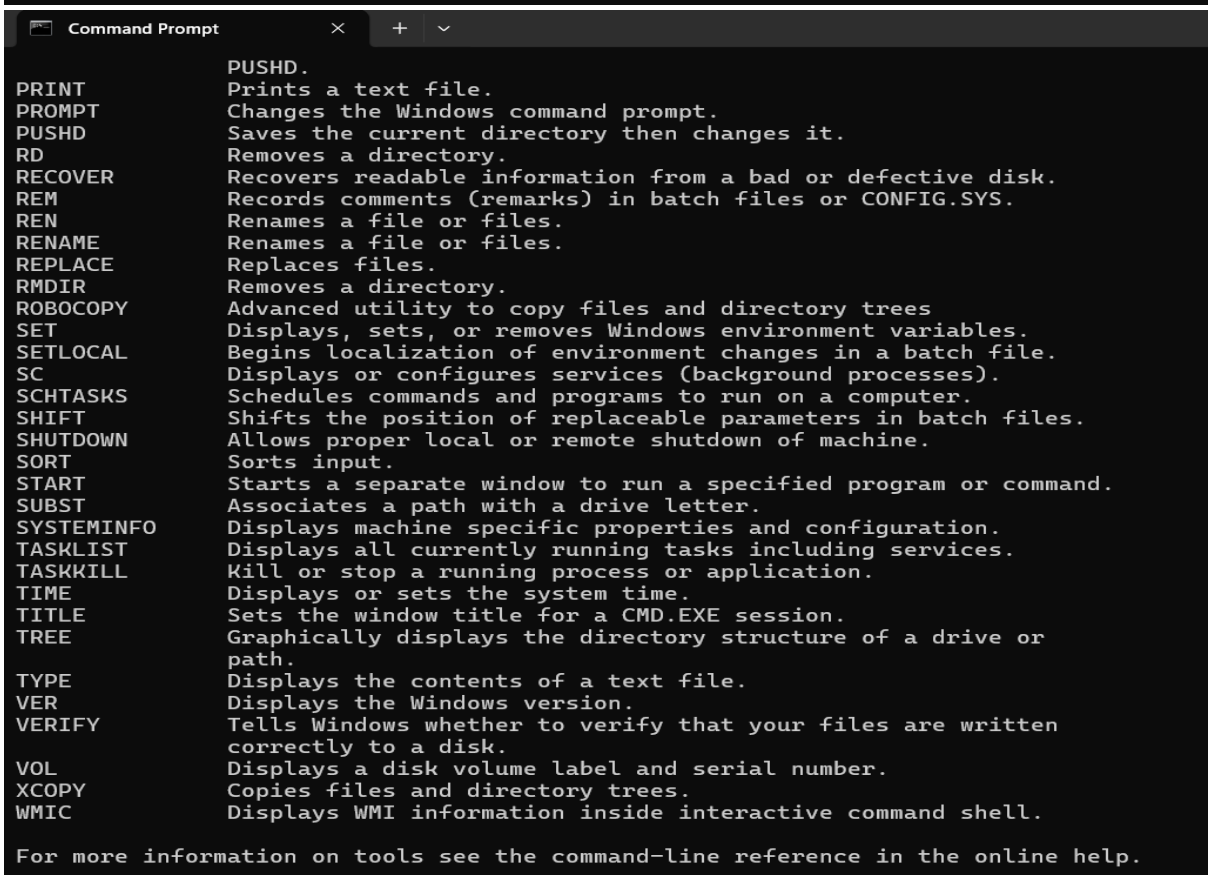
PRACTICAL 1

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.

Command Prompt
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.
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.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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.

2. Change the current working directory of the user

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

C:\Users\91942\OneDrive>dir
 Volume in drive C is Windows
 Volume Serial Number is 106D-CD90

 Directory of C:\Users\91942\OneDrive

19-01-2026  18:58    <DIR>          .
18-01-2026  21:04    <DIR>          ..
04-02-2024  11:55    <DIR>          Attachments
19-01-2026  19:04    <DIR>          Desktop
18-01-2026  20:58    <DIR>          Documents
16-02-2023  18:13       (1,053,417) Getting started with OneDrive.pdf
28-09-2023  14:27           406,190 Oramega D3.xlsx
19-01-2026  18:58             1,140 Personal Vault.lnk
13-01-2026  20:18    <DIR>          Pictures
               3 File(s)      1,460,747 bytes
               6 Dir(s)  42,983,305,216 bytes free

C:\Users\91942\OneDrive>cd Desktop

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

3. Lists all the contents in the current working directory

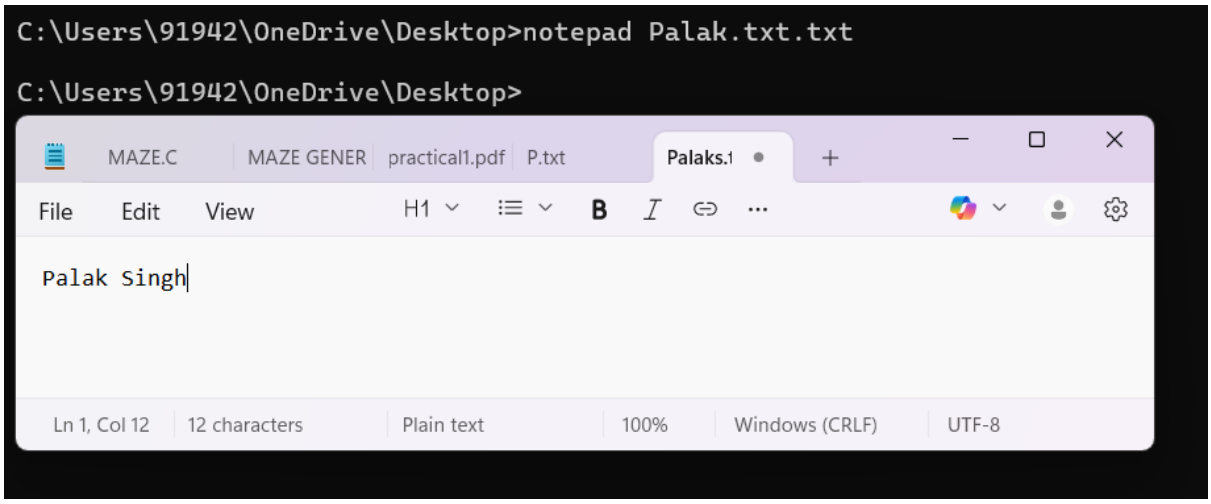
```
C:\Users\91942\OneDrive\Desktop>dir
 Volume in drive C is Windows
 Volume Serial Number is 106D-CD90

 Directory of C:\Users\91942\OneDrive\Desktop

19-01-2026  19:04    <DIR>          .
19-01-2026  18:58    <DIR>          ..
24-09-2025  18:08           151,718 12th marsheet.jpg
29-06-2024  20:33             3,028 Collections   Microsoft Learn.lnk
11-04-2024  16:19           332,437 Dr. GAUTAM PINCHA.mhtml
18-01-2026  20:49            41,728 EVS
24-09-2025  18:03           149,405 fees receipt.jpg
18-01-2026  20:30         5,988,753 ilovepdf_pages-to-jpg.zip
09-08-2025  09:54        10,506,941 IMG_3406(1).jpg
08-06-2025  17:48    <DIR>          KAIZAN PURCHASE ORDER
19-01-2026  19:03    <DIR>          OS_CD24026
18-01-2026  20:54           189,801 palak evs.pdf
29-10-2025  20:35             2,322 Perplexity.lnk
04-01-2026  20:45    <DIR>          pics
23-07-2025  22:24    <DIR>          PP
18-01-2026  20:35           470,552 prelab output (1)_page-0008.jpg
18-01-2026  20:35           297,173 prelab output (1)_page-0009.jpg
18-01-2026  20:35           288,390 prelab output (1)_page-0010.jpg
18-01-2026  20:34           152,705 prelab output (1)_page-0011.jpg
18-01-2026  20:34           176,136 prelab output (1)_page-0012.jpg
18-01-2026  20:34           233,710 prelab output (1)_page-0013.jpg
18-01-2026  20:34           214,561 prelab output (1)_page-0014.jpg
18-01-2026  20:34           233,962 prelab output (1)_page-0015.jpg
18-01-2026  20:34           206,851 prelab output (1)_page-0016.jpg
18-01-2026  20:34           279,513 prelab output (1)_page-0017.jpg
08-01-2026  07:37            17,229 skill set 1(palak singh CD24026).docx
08-01-2026  07:44            17,028 skill set 2.docx
18-01-2026  18:22    <DIR>          TVISHA
24-09-2025  18:13           134,770 undertaking.jpg
              22 File(s)     20,088,713 bytes
               7 Dir(s)  42,161,000,448 bytes free

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

4. Read, modify or concatenate text files

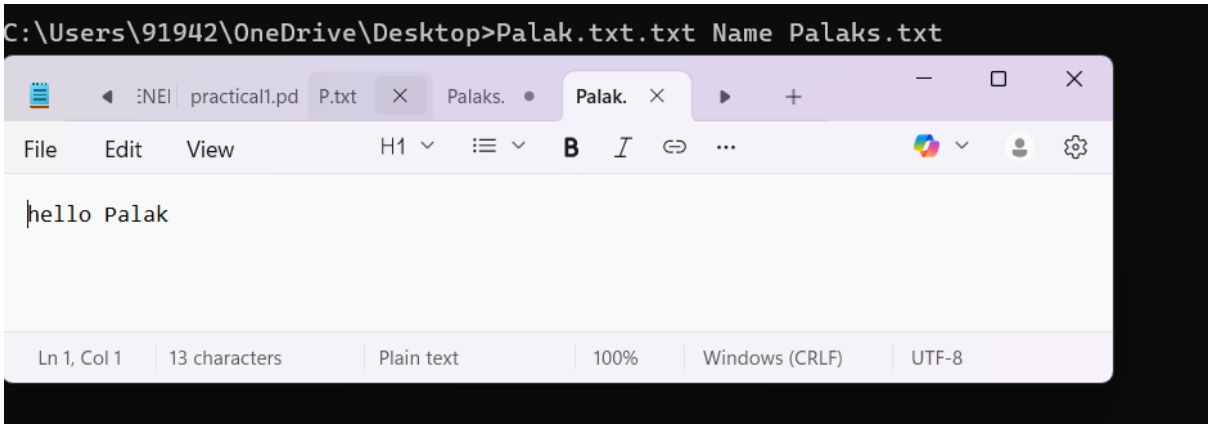
- Read a text file:

```
C:\Users\91942\OneDrive\Desktop>echo hello Palak > Palak.txt.txt

C:\Users\91942\OneDrive\Desktop>type Palak.txt.txt
hello Palak
```

- Modify a text file:



- Concatenate text files:



5. Create a new directory under any directory

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

C:\Users\91942\OneDrive\Desktop>md Practical
A subdirectory or file Practical already exists.

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

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\91942\OneDrive\Desktop>del P.txt

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

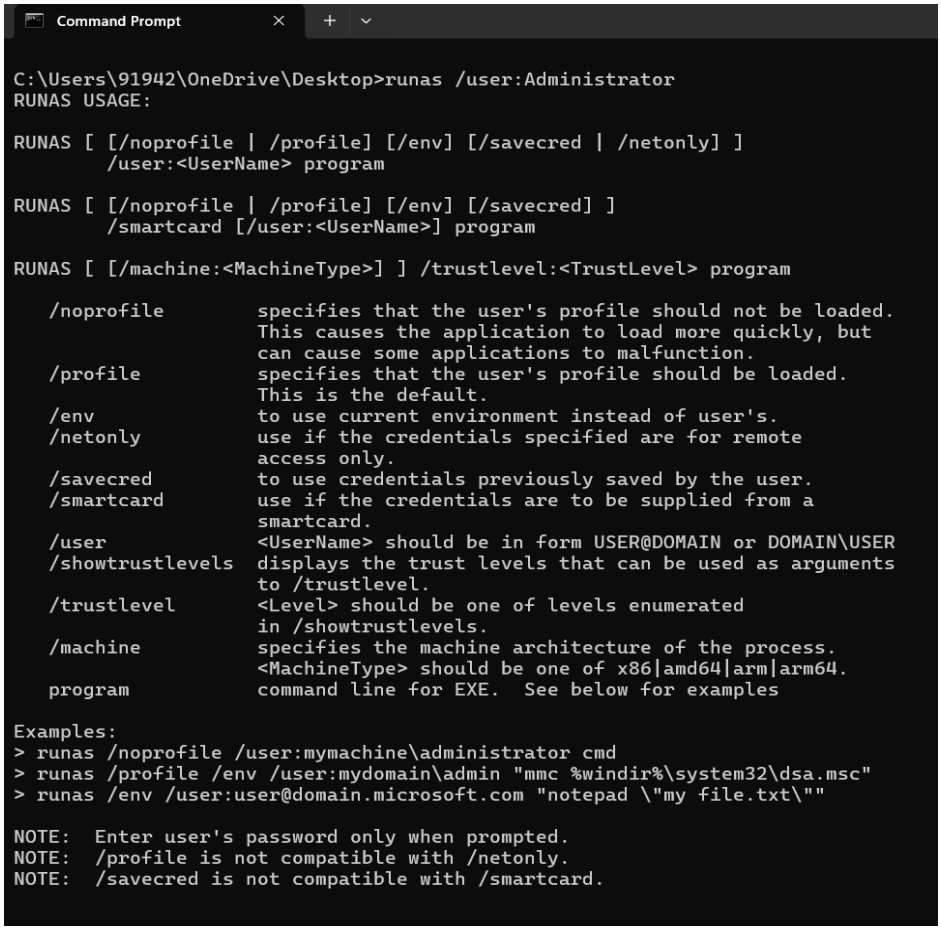
9. Delete a directory

```
C:\Users\91942\OneDrive\Desktop>rmdir/s Palak
Palak, Are you sure (Y/N)? y

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

10. Copy a file or directory

```
C:\Users\91942\OneDrive\Desktop>copy Palak.txt.txt Palak.txt
Overwrite Palak.txt? (Yes/No/All): All
        1 file(s) copied.

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

11. Switch to root-user



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\91942\OneDrive\Desktop>find "palak" Palak.txt

---------- PALAK.TXT

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

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

```
C:\Users\91942\OneDrive\Desktop>more Palak.txt
Palak
Anushka
Ayushi
Deepika
Nandini
Rupali

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

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

```
C:\Users\91942\OneDrive\Desktop>type Palak.txt
Palak
Anushka
Ayushi
Deepika
Nandini
Rupali

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

16. Remove read permission from owner of the file

```
C:\Users\91942\OneDrive\Desktop>icacls Palak.txt /deny "91942":R
processed file: Palak.txt
Successfully processed 1 files; Failed processing 0 files

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

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

```
C:\Users\91942\OneDrive\Desktop>icacls Palak.txt /grant "91942":R
processed file: Palak.txt
Successfully processed 1 files; Failed processing 0 files

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

18. Add write permission to owner no permission to others

```
C:\Users\91942\OneDrive\Desktop>icacls Palak.txt /grant "91942":W
processed file: Palak.txt
Successfully processed 1 files; Failed processing 0 files

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

19. Assign permission to users

```
C:\Users\91942\OneDrive\Desktop>icacls Palak.txt /grant "91942":F
processed file: Palak.txt
Successfully processed 1 files; Failed processing 0 files

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

20. Assign R/W/X to others

```
C:\Users\91942\OneDrive\Desktop>icacls Palaks.txt /grant "91942":F
processed file: Palaks.txt
Successfully processed 1 files; Failed processing 0 files

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

21. Remove all permission from all users

```
C:\Users\91942\OneDrive\Desktop>icacls Palak.txt /remove Everyone
processed file: Palak.txt
Successfully processed 1 files; Failed processing 0 files

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

22. Remove read permission from user using absolute mode

```
C:\Users\91942\OneDrive\Desktop>icacls Palak.txt /deny "91942":R
processed file: Palak.txt
Successfully processed 1 files; Failed processing 0 files

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

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

```
C:\Users\91942\OneDrive\Desktop>icacls Palak.txt /grant "91942":RW
processed file: Palak.txt
Successfully processed 1 files; Failed processing 0 files
```

```
C:\Users\91942\OneDrive\Desktop>icacls Palak.txt /remove Everyone
processed file: Palak.txt
Successfully processed 1 files; Failed processing 0 files
```

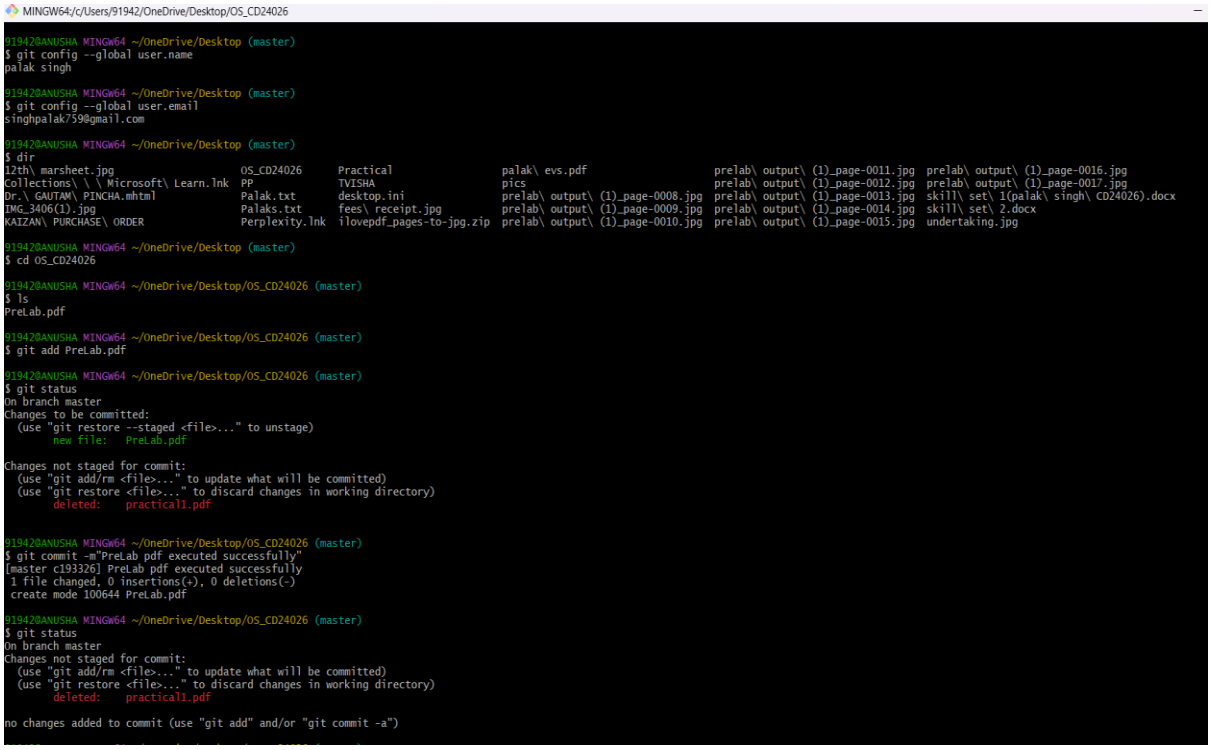
24. Add execute permission to owner, read permission to group and other

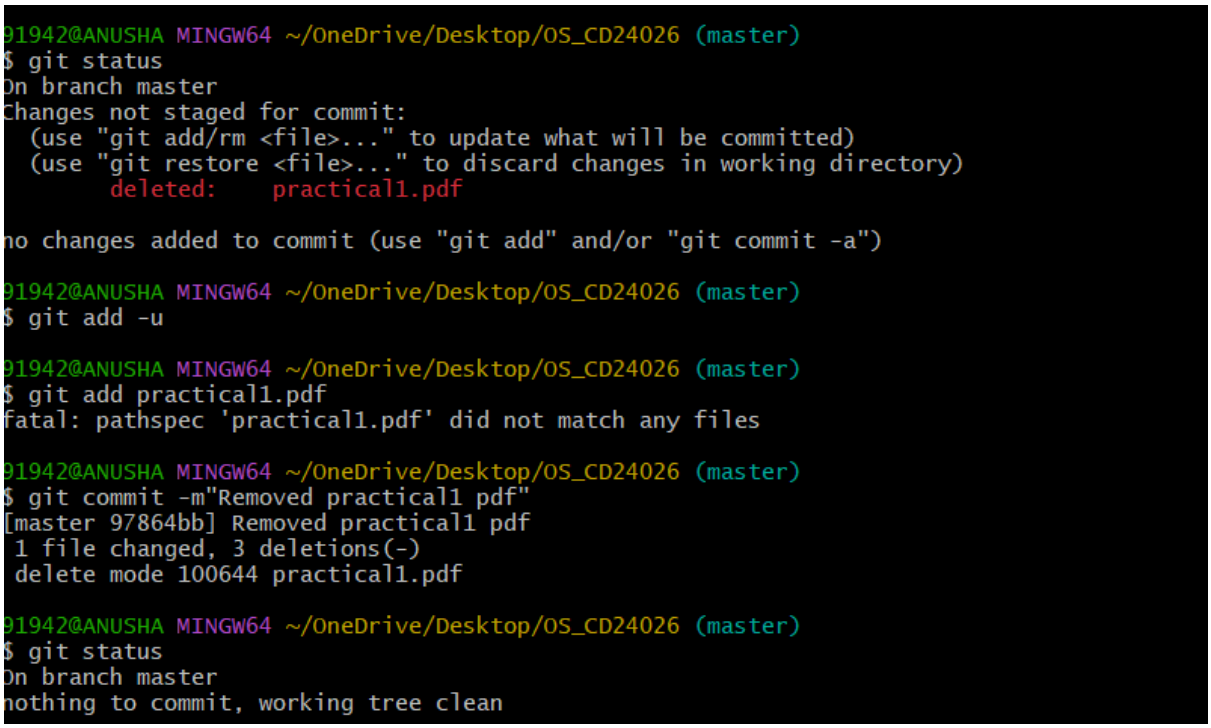
```
C:\Users\91942\OneDrive\Desktop>icacls Palak.txt /grant "91942":RX Everyone:R
processed file: Palak.txt
Successfully processed 1 files; Failed processing 0 files

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

25. Add execute permission to all user

```
C:\Users\91942\OneDrive\Desktop>icacls Palak.txt /grant Everyone:RX
processed file: Palak.txt
Successfully processed 1 files; Failed processing 0 files
```

IN LINUX/UNIX:





```
91942@ANUSHA MINGW64 ~/OneDrive/Desktop/OS_CD24026 (master)
$ git status
On branch master
nothing to commit, working tree clean

91942@ANUSHA MINGW64 ~/OneDrive/Desktop/OS_CD24026 (master)
$ git branch -M main

91942@ANUSHA MINGW64 ~/OneDrive/Desktop/OS_CD24026 (main)
$ git remote add origin https://github.com/singhpalak759-cell/OS_CD24026.git

91942@ANUSHA MINGW64 ~/OneDrive/Desktop/OS_CD24026 (main)
$ git push -u origin main
info: please complete authentication in your browser...
Enumerating objects: 8, done.
Counting objects: 100% (8/8), done.
Delta compression using up to 8 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (8/8), 1.88 MiB | 1.30 MiB/s, done.
Total 8 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/singhpalak759-cell/OS_CD24026.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.

91942@ANUSHA MINGW64 ~/OneDrive/Desktop/OS_CD24026 (main)
$
```