

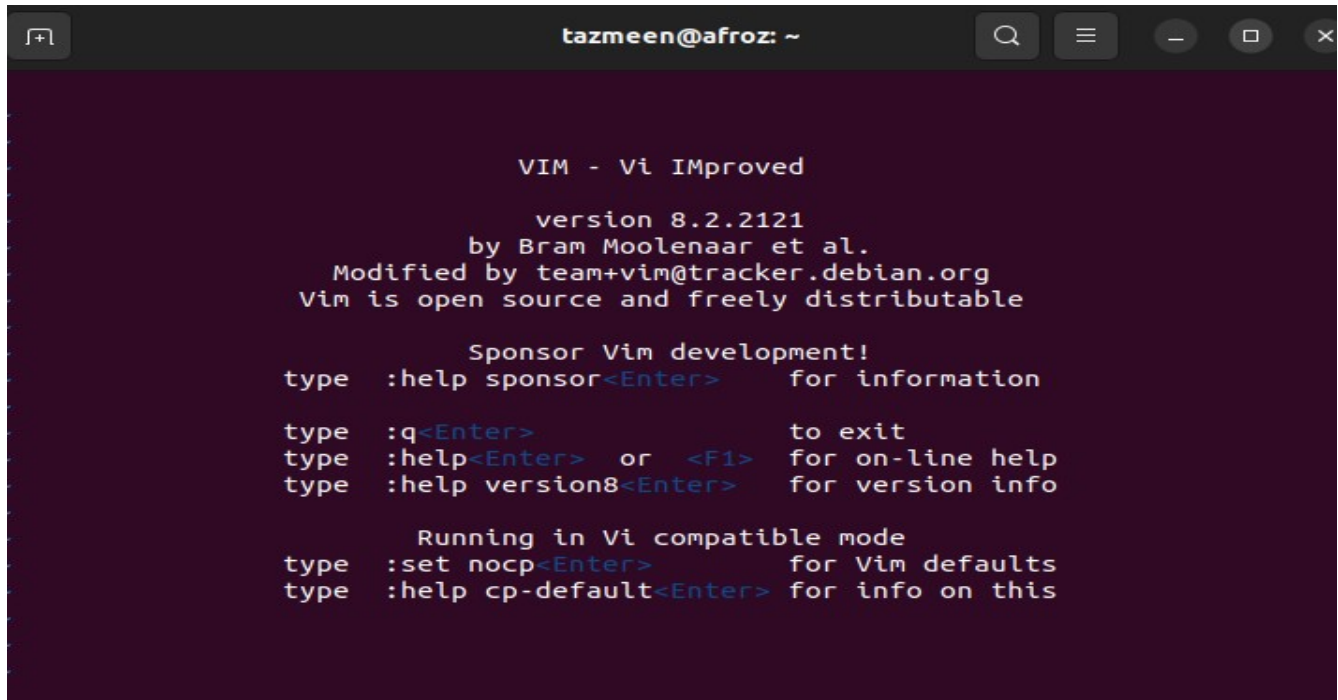
Name : Tazmeen Afroz

Roll No : 22P-9252

Section : BAI-5A

### Lab Task-04

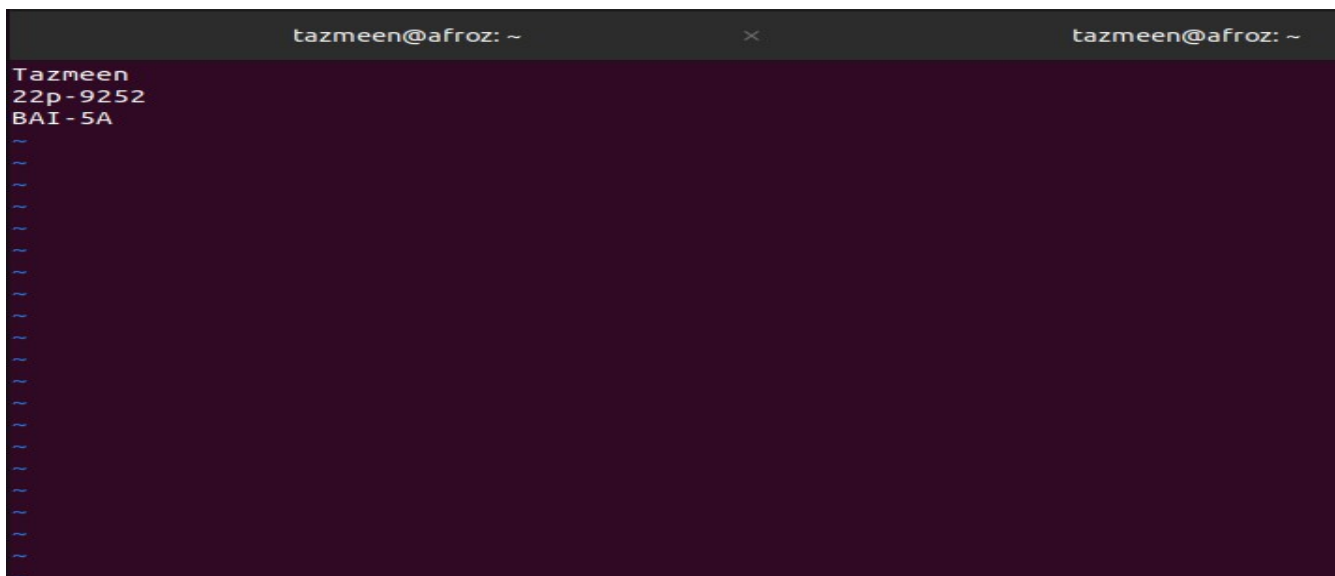
Command : vim

A screenshot of a terminal window titled 'tazmeen@afroz: ~'. The terminal displays the Vim startup screen with the following text: 'VIM - Vi IMproved', 'version 8.2.2121', 'by Bram Moolenaar et al.', 'Modified by team+vim@tracker.debian.org', 'Vim is open source and freely distributable'. It then lists several help topics: ':help sponsor' for information, ':q' to exit, ':help' or '<F1>' for on-line help, ':help version8' for version info, ':set nocp' for Vim defaults, and ':help cp-default' for info on this. The terminal has a dark purple background and a light gray border with standard window controls.

### Vim Editor:

- Press I for insert mode.
- Use :wq to write and quit the file.

Use :w for changes

A screenshot of a terminal window titled 'tazmeen@afroz: ~'. The terminal shows the Vim editor in insert mode. The first three lines of the file are 'Tazmeen', '22p-9252', and 'BAI-5A'. The rest of the file is empty, indicated by a series of tilde characters (~) on the left margin. The terminal has a dark purple background and a light gray border with standard window controls.

:wq  
for writing

[illegible]

```
(base) tazmeen@afroz:~$ ls
anaconda3  Desktop  Documents  Downloads  file.c  file.o  main  Music  Pictures  Public  snap  Templates  test  test.txt  Videos
(base) tazmeen@afroz:~$
```

## Basic Commands:

- `ls -li`: Displays inode values of files.
- `ln file1 file2`: Creates a hard link.
  - Changes in one file will be reflected in the other.
  - Deleting one file does not affect the other; both files remain accessible.
- `ln -s target linkname`: Creates a soft (symbolic) link.
  - Deleting the original file leaves a dangling pointer (broken link).

- `ls -lh`: Lists files with human-readable sizes.

`ls-i`

gives inode values

```
(base) tazmeen@afroz:~$ ls -li
394743 anaconda3 131104 Documents 147226 file.c 1839642 main 131106 Pictures 131194 snap 141152 test 131107 Videos
131100 Desktop 131101 Downloads 147222 file.o 131105 Music 131103 Public 131102 Templates 147274 test.txt
(base) tazmeen@afroz:~$
```

```
(base) tazmeen@afroz:~/Desktop$ mkdir main
(base) tazmeen@afroz:~/Desktop$ touch file.txt
(base) tazmeen@afroz:~/Desktop$ vim file.txt
```

vim editor

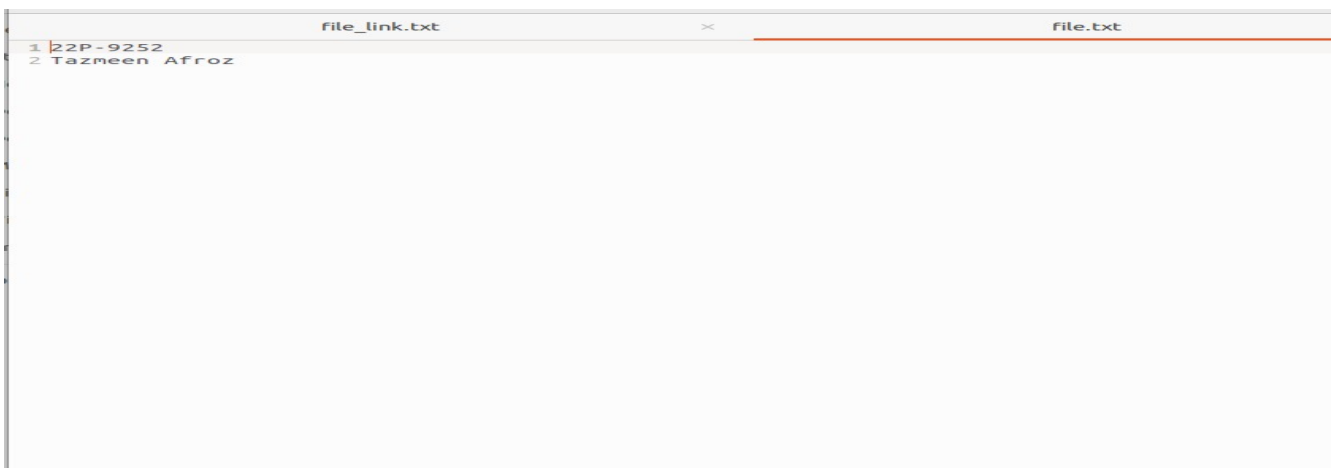
```
(base) tazmeen@afroz:~/Desktop$ cd main
(base) tazmeen@afroz:~/Desktop/main$ vim file.txt
(base) tazmeen@afroz:~/Desktop/main$
```

```
Tazmeen Afroz
~
~
~
~
```

`ln` command to create a hard link

```
(base) tazmeen@afroz:~/Desktop/main$ ln file.txt file_link.txt
(base) tazmeen@afroz:~/Desktop/main$ ls
file_link.txt file.txt
(base) tazmeen@afroz:~/Desktop/main$
```

If we change one file then change occurs in the both files



If we delete the one file then the other file will remain

```
(base) tazmeen@afroz:~/Desktop/main$ rm file.txt
(base) tazmeen@afroz:~/Desktop/main$ ls
file_link.txt
(base) tazmeen@afroz:~/Desktop/main$
```

command for creating soft link

```
(base) tazmeen@afroz:~/Desktop/main$ ln -s file_link.txt file_soft.txt
(base) tazmeen@afroz:~/Desktop/main$ cat file_soft.txt
22P-9252
Tazmeen Afroz
(base) tazmeen@afroz:~/Desktop/main$
```

```
Tazmeen Afroz
(base) tazmeen@afroz:~/Desktop/main$ ls
file_link.txt  file_soft.txt
(base) tazmeen@afroz:~/Desktop/main$
```

ls-lh

```
(base) tazmeen@afroz:~/Desktop/main$ ls -lh
total 4.0K
-rw-rw-r-- 1 tazmeen tazmeen 23 Sep 13 09:08 file_link.txt
lrwxrwxrwx 1 tazmeen tazmeen 13 Sep 13 09:18 file_soft.txt -> file_link.txt
(base) tazmeen@afroz:~/Desktop/main$
```

changes in one file lead to the changes in other

```
(base) tazmeen@afroz:~/Desktop/main$ cat file_soft.txt
22P-9252
Tazmeen Afroz
(base) tazmeen@afroz:~/Desktop/main$ cat file_link.txt
22P-9252
Tazmeen Afroz
(base) tazmeen@afroz:~/Desktop/main$ vim file_soft.txt
(base) tazmeen@afroz:~/Desktop/main$ vim file_soft.txt
(base) tazmeen@afroz:~/Desktop/main$ cat file_soft.txt
22P-9252
Tazmeen Afroz
BAI-5A
(base) tazmeen@afroz:~/Desktop/main$ cat file_link.txt
22P-9252
Tazmeen Afroz
BAI-5A
(base) tazmeen@afroz:~/Desktop/main$
```

```

BAI-5A
(base) tazmeen@afroz:~/Desktop/main$ rm file_soft.txt
(base) tazmeen@afroz:~/Desktop/main$ ls -lh
total 4.0K
-rw-rw-r-- 1 tazmeen tazmeen 30 Sep 13 09:24 file_link.txt
(base) tazmeen@afroz:~/Desktop/main$

```

deleting the main file

```

(base) tazmeen@afroz:~/Desktop/main$ ln -s file_link.txt file_soft.txt
(base) tazmeen@afroz:~/Desktop/main$ rm file_link.txt
(base) tazmeen@afroz:~/Desktop/main$ ls
file_soft.txt
(base) tazmeen@afroz:~/Desktop/main$

```

```

(base) tazmeen@afroz:~/Desktop/main$ ls -lh
total 0
lrwxrwxrwx 1 tazmeen tazmeen 13 Sep 13 09:34 file_soft.txt -> file_link.txt
(base) tazmeen@afroz:~/Desktop/main$

```

dangling pointer

```

cat 0
wxrwxrwx 1 tazmeen tazmeen 13 Sep 13 09:34 file_soft.txt -> file_link.txt
(base) tazmeen@afroz:~/Desktop/main$ cat file_soft.txt
t: file_soft.txt: No such file or directory
(base) tazmeen@afroz:~/Desktop/main$

```

```

(base) tazmeen@afroz:~/Desktop/main$ touch main.txt
(base) tazmeen@afroz:~/Desktop/main$ vim main.txt
(base) tazmeen@afroz:~/Desktop/main$ ln -s main.txt soft.txt
(base) tazmeen@afroz:~/Desktop/main$ cat soft.txt
Tazmeen Afroz
(base) tazmeen@afroz:~/Desktop/main$ rm main.txt
(base) tazmeen@afroz:~/Desktop/main$ touch main.txt
(base) tazmeen@afroz:~/Desktop/main$ vim main.txt
(base) tazmeen@afroz:~/Desktop/main$ ln -s main.txt soft.txt
(base) tazmeen@afroz:~/Desktop/main$ cat soft.txt
22P-9252
(base) tazmeen@afroz:~/Desktop/main$

```



## All Commands of the manual page 5

```
(base) tazmeen@afroz:~/Desktop/main$ ls
file_soft.txt  main.txt  soft.txt
(base) tazmeen@afroz:~/Desktop/main$ touch blankfile
(base) tazmeen@afroz:~/Desktop/main$ mkdir blankdir
(base) tazmeen@afroz:~/Desktop/main$ ls
blankdir  blankfile  file_soft.txt  main.txt  soft.txt
(base) tazmeen@afroz:~/Desktop/main$ ln blankdir dirpointer
ln: blankdir: hard link not allowed for directory
(base) tazmeen@afroz:~/Desktop/main$ ln -s blankdir dirpointer
(base) tazmeen@afroz:~/Desktop/main$ ln blankfile filepointer
(base) tazmeen@afroz:~/Desktop/main$ cat < blankfile
(base) tazmeen@afroz:~/Desktop/main$ cat < filepointer
(base) tazmeen@afroz:~/Desktop/main$ echo "Hello dear" > filepointer
(base) tazmeen@afroz:~/Desktop/main$ cat < blankfile
Hello dear
(base) tazmeen@afroz:~/Desktop/main$ cat < filepointer
Hello dear
(base) tazmeen@afroz:~/Desktop/main$ ls
blankdir  blankfile  dirpointer  filepointer  file_soft.txt  main.txt  soft.txt
(base) tazmeen@afroz:~/Desktop/main$ ls -lh
total 16K
drwxrwxr-x 2 tazmeen tazmeen 4.0K Sep 13 09:43 blankdir
-rw-rw-r-- 2 tazmeen tazmeen 11 Sep 13 09:45 blankfile
lrwxrwxrwx 1 tazmeen tazmeen 8 Sep 13 09:44 dirpointer -> blankdir
-rw-rw-r-- 2 tazmeen tazmeen 11 Sep 13 09:45 filepointer
lrwxrwxrwx 1 tazmeen tazmeen 13 Sep 13 09:34 file_soft.txt -> file_link.txt
-rw-rw-r-- 1 tazmeen tazmeen 9 Sep 13 09:42 main.txt
lrwxrwxrwx 1 tazmeen tazmeen 8 Sep 13 09:42 soft.txt -> main.txt
```

```

(base) tazmeen@afroz:~/Desktop/main$ ls /etc -lh
total 1.2M
drwxr-xr-x 3 root root 4.0K Feb 21 2024 acpi
-rw-r--r-- 1 root root 3.0K Feb 21 2024 adduser.conf
drwxr-xr-x 3 root root 4.0K Feb 21 2024 alsa
drwxr-xr-x 2 root root 4.0K Sep 13 08:24 alternatives
-rw-r--r-- 1 root root 335 Mar 23 2022 anacrontab
-rw-r--r-- 1 root root 433 Mar 23 2022 apg.conf
drwxr-xr-x 5 root root 4.0K Feb 21 2024 apm
drwxr-xr-x 3 root root 4.0K Sep 6 06:34 apparmor
drwxr-xr-x 8 root root 4.0K Sep 6 06:34 apparmor.d
drwxr-xr-x 4 root root 4.0K Sep 6 06:34 appport
-rw-r--r-- 1 root root 769 Feb 22 2022 appstream.conf
drwxr-xr-x 8 root root 4.0K Aug 18 12:40 apt
drwxr-xr-x 3 root root 4.0K Feb 21 2024 avahi
-rw-r--r-- 1 root root 2.3K Jan 6 2022 bash.bashrc
-rw-r--r-- 1 root root 45 Nov 11 2021 bash_completion
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 bash_completion.d
-rw-r--r-- 1 root root 367 Dec 16 2020 bindresvport.blacklist
drwxr-xr-x 2 root root 4.0K Apr 8 2022 binfmt.d
drwxr-xr-x 2 root root 4.0K Aug 17 16:15 bluetooth
-rw-r--r-- 1 root root 33 Feb 21 2024 brlapi.key
drwxr-xr-x 7 root root 4.0K Feb 21 2024 brltty
-rw-r--r-- 1 root root 29K Jun 28 2022 brltty.conf
drwxr-xr-x 3 root root 4.0K Feb 21 2024 ca-certificates
-rw-r--r-- 1 root root 6.2K Feb 21 2024 ca-certificates.conf
-rw-r--r-- 1 root root 5.4K Feb 21 2024 ca-certificates.conf.dpkg-old
drwxr-s--- 2 root dip 4.0K Feb 21 2024 chatscripts
drwxr-xr-x 2 root root 4.0K Aug 17 15:47 console-setup
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cracklib
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 cron.d
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 cron.daily
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.hourly
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.monthly
-rw-r--r-- 1 root root 1.2K Mar 23 2022 crontab
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.weekly

```

```

(base) tazmeen@afroz:~/Desktop/main$ ls /etc -lh | less
(base) tazmeen@afroz:~/Desktop/main$ ls /etc -lh | less
(base) tazmeen@afroz:~/Desktop/main$

```

```

total 1.2M
drwxr-xr-x 3 root root 4.0K Feb 21 2024 acpi
-rw-r--r-- 1 root root 3.0K Feb 21 2024 adduser.conf
drwxr-xr-x 3 root root 4.0K Feb 21 2024 alsa
drwxr-xr-x 2 root root 4.0K Sep 13 08:24 alternatives
-rw-r--r-- 1 root root 335 Mar 23 2022 anacrontab
-rw-r--r-- 1 root root 433 Mar 23 2022 apg.conf
drwxr-xr-x 5 root root 4.0K Feb 21 2024 apm
drwxr-xr-x 3 root root 4.0K Sep 6 06:34 apparmor
drwxr-xr-x 8 root root 4.0K Sep 6 06:34 apparmor.d
drwxr-xr-x 4 root root 4.0K Sep 6 06:34 appport
-rw-r--r-- 1 root root 769 Feb 22 2022 appstream.conf
drwxr-xr-x 8 root root 4.0K Aug 18 12:40 apt
drwxr-xr-x 3 root root 4.0K Feb 21 2024 avahi
-rw-r--r-- 1 root root 2.3K Jan 6 2022 bash.bashrc
-rw-r--r-- 1 root root 45 Nov 11 2021 bash_completion
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 bash_completion.d
-rw-r--r-- 1 root root 367 Dec 16 2020 bindresvport.blacklist
drwxr-xr-x 2 root root 4.0K Apr 8 2022 binfmt.d
drwxr-xr-x 2 root root 4.0K Aug 17 16:15 bluetooth
-rw-r--r-- 1 root root 33 Feb 21 2024 brlapi.key
drwxr-xr-x 7 root root 4.0K Feb 21 2024 brltty
-rw-r--r-- 1 root root 29K Jun 28 2022 brltty.conf
drwxr-xr-x 3 root root 4.0K Feb 21 2024 ca-certificates
-rw-r--r-- 1 root root 6.2K Feb 21 2024 ca-certificates.conf
-rw-r--r-- 1 root root 5.4K Feb 21 2024 ca-certificates.conf.dpkg-old
drwxr-s-- 2 root dip 4.0K Feb 21 2024 chatscripts
drwxr-xr-x 2 root root 4.0K Aug 17 15:47 console-setup
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cracklib
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 cron.d
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 cron.daily
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.hourly
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.monthly
-rw-r--r-- 1 root root 1.2K Mar 23 2022 crontab
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.weekly
drwxr-xr-x 5 root lp 4.0K Sep 13 08:43 cups
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cupshelpers

```

## Redirection

```

(base) tazmeen@afroz:~/Desktop/main$ ls /etc -lh | less
(base) tazmeen@afroz:~/Desktop/main$ ls /etc -lh > temp.txt
(base) tazmeen@afroz:~/Desktop/main$ nano temp.txt

```

## temp.txt

```

GNU nano 6.2 temp.txt
total 1.2M
drwxr-xr-x 3 root root 4.0K Feb 21 2024 acpi
-rw-r--r-- 1 root root 3.0K Feb 21 2024 adduser.conf
drwxr-xr-x 3 root root 4.0K Feb 21 2024 alsa
drwxr-xr-x 2 root root 4.0K Sep 13 08:24 alternatives
-rw-r--r-- 1 root root 335 Mar 23 2022 anacrontab
-rw-r--r-- 1 root root 433 Mar 23 2022 apg.conf
drwxr-xr-x 5 root root 4.0K Feb 21 2024 apm
drwxr-xr-x 3 root root 4.0K Sep 6 06:34 apparmor
drwxr-xr-x 8 root root 4.0K Sep 6 06:34 apparmor.d
drwxr-xr-x 4 root root 4.0K Sep 6 06:34 appport
-rw-r--r-- 1 root root 769 Feb 22 2022 appstream.conf
drwxr-xr-x 8 root root 4.0K Aug 18 12:40 apt
drwxr-xr-x 3 root root 4.0K Feb 21 2024 avahi
-rw-r--r-- 1 root root 2.3K Jan 6 2022 bash.bashrc
-rw-r--r-- 1 root root 45 Nov 11 2021 bash_completion
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 bash_completion.d
-rw-r--r-- 1 root root 367 Dec 16 2020 bindresvport.blacklist
drwxr-xr-x 2 root root 4.0K Apr 8 2022 binfmt.d
drwxr-xr-x 2 root root 4.0K Aug 17 16:15 bluetooth
-rw-r--r-- 1 root root 33 Feb 21 2024 brlapi.key
drwxr-xr-x 7 root root 4.0K Feb 21 2024 brltty
-rw-r--r-- 1 root root 29K Jun 28 2022 brltty.conf
drwxr-xr-x 3 root root 4.0K Feb 21 2024 ca-certificates
-rw-r--r-- 1 root root 6.2K Feb 21 2024 ca-certificates.conf
-rw-r--r-- 1 root root 5.4K Feb 21 2024 ca-certificates.conf.dpkg-old
drwxr-s-- 2 root dip 4.0K Feb 21 2024 chatscripts
drwxr-xr-x 2 root root 4.0K Aug 17 15:47 console-setup
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cracklib
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 cron.d
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 cron.daily
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.hourly
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.monthly
-rw-r--r-- 1 root root 1.2K Mar 23 2022 crontab
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.weekly
drwxr-xr-x 5 root lp 4.0K Sep 13 08:43 cups
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cupshelpers
drwxr-xr-x 4 root root 4.0K Feb 21 2024 dbus-1
drwxr-xr-x 4 root root 4.0K Feb 21 2024 dconf

```

Read 228 lines

PG Help    PG Write Out    ^M Where Is    ^M Cut    ^M Execute    ^M Location    ^M Undo    ^M Set Mark    ^M To Bracket    ^M Previous    ^M Back  
 ^X Exit    ^R Read File    ^M Replace    ^M Paste    ^M Justify    ^M Go To Line    ^M Redo    ^M Copy    ^M Where Was    ^M Next    ^M Forward



## File Viewers:

- more temp.txt: Displays the contents of temp.txt page by page.
- less temp.txt: Allows backward and forward movement through temp.txt.

### more temp.txt

```
total 1.2M
drwxr-xr-x 3 root root 4.0K Feb 21 2024 acpi
-rw-r--r-- 1 root root 3.0K Feb 21 2024 adduser.conf
drwxr-xr-x 3 root root 4.0K Feb 21 2024 alsa
drwxr-xr-x 2 root root 4.0K Sep 13 08:24 alternatives
-rw-r--r-- 1 root root 335 Mar 23 2022 anacrontab
-rw-r--r-- 1 root root 433 Mar 23 2022 appg.conf
drwxr-xr-x 5 root root 4.0K Feb 21 2024 apm
drwxr-xr-x 3 root root 4.0K Sep 6 06:34 apparmor
drwxr-xr-x 8 root root 4.0K Sep 6 06:34 apparmor.d
drwxr-xr-x 4 root root 4.0K Sep 6 06:34 appport
-rw-r--r-- 1 root root 769 Feb 22 2022 appstream.conf
drwxr-xr-x 8 root root 4.0K Aug 18 12:40 apt
drwxr-xr-x 3 root root 4.0K Feb 21 2024 avahi
-rw-r--r-- 1 root root 2.3K Jan 6 2022 bash.bashrc
-rw-r--r-- 1 root root 45 Nov 11 2021 bash_completion
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 bash_completion.d
-rw-r--r-- 1 root root 367 Dec 16 2020 bindresvport.blacklist
drwxr-xr-x 2 root root 4.0K Apr 8 2022 binfmt.d
drwxr-xr-x 2 root root 4.0K Aug 17 16:15 bluetooth
-rw-r--r-- 1 root root 33 Feb 21 2024 brlapi.key
drwxr-xr-x 7 root root 4.0K Feb 21 2024 brltty
-rw-r--r-- 1 root root 29K Jun 28 2022 brltty.conf
drwxr-xr-x 3 root root 4.0K Feb 21 2024 ca-certificates
-rw-r--r-- 1 root root 6.2K Feb 21 2024 ca-certificates.conf
-rw-r--r-- 1 root root 5.4K Feb 21 2024 ca-certificates.conf.dpkg-old
drwxr-s--- 2 root dpkg 4.0K Feb 21 2024 chatscripts
drwxr-xr-x 2 root root 4.0K Aug 17 15:47 console-setup
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cracklib
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 cron.d
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 cron.daily
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.hourly
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.monthly
-rw-r--r-- 1 root root 1.2K Mar 23 2022 crontab
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.weekly
drwxr-xr-x 5 root lp 4.0K Sep 13 08:43 cups
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cupshelpers
drwxr-xr-x 4 root root 4.0K Feb 21 2024 dbus-1
drwxr-xr-x 4 root root 4.0K Feb 21 2024 dconf
-rw-r--r-- 1 root root 2.9K Feb 20 2022 debconf.conf
-rw-r--r-- 1 root root 13 Aug 22 2021 debian_version
drwxr-xr-x 3 root root 4.0K Sep 6 06:34 default
--More-- (18%)
```

### less temp.txt

```
total 1.2M
drwxr-xr-x 3 root root 4.0K Feb 21 2024 acpi
-rw-r--r-- 1 root root 3.0K Feb 21 2024 adduser.conf
drwxr-xr-x 3 root root 4.0K Feb 21 2024 alsa
drwxr-xr-x 2 root root 4.0K Sep 13 08:24 alternatives
-rw-r--r-- 1 root root 335 Mar 23 2022 anacrontab
-rw-r--r-- 1 root root 433 Mar 23 2022 appg.conf
drwxr-xr-x 5 root root 4.0K Feb 21 2024 apm
drwxr-xr-x 3 root root 4.0K Sep 6 06:34 apparmor
drwxr-xr-x 8 root root 4.0K Sep 6 06:34 apparmor.d
drwxr-xr-x 4 root root 4.0K Sep 6 06:34 appport
-rw-r--r-- 1 root root 769 Feb 22 2022 appstream.conf
drwxr-xr-x 8 root root 4.0K Aug 18 12:40 apt
drwxr-xr-x 3 root root 4.0K Feb 21 2024 avahi
-rw-r--r-- 1 root root 2.3K Jan 6 2022 bash.bashrc
-rw-r--r-- 1 root root 45 Nov 11 2021 bash_completion
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 bash_completion.d
-rw-r--r-- 1 root root 367 Dec 16 2020 bindresvport.blacklist
drwxr-xr-x 2 root root 4.0K Apr 8 2022 binfmt.d
drwxr-xr-x 2 root root 4.0K Aug 17 16:15 bluetooth
-rw-r--r-- 1 root root 33 Feb 21 2024 brlapi.key
drwxr-xr-x 7 root root 4.0K Feb 21 2024 brltty
-rw-r--r-- 1 root root 29K Jun 28 2022 brltty.conf
drwxr-xr-x 3 root root 4.0K Feb 21 2024 ca-certificates
-rw-r--r-- 1 root root 6.2K Feb 21 2024 ca-certificates.conf
-rw-r--r-- 1 root root 5.4K Feb 21 2024 ca-certificates.conf.dpkg-old
drwxr-s--- 2 root dpkg 4.0K Feb 21 2024 chatscripts
drwxr-xr-x 2 root root 4.0K Aug 17 15:47 console-setup
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cracklib
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 cron.d
drwxr-xr-x 2 root root 4.0K Sep 6 06:34 cron.daily
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.hourly
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.monthly
-rw-r--r-- 1 root root 1.2K Mar 23 2022 crontab
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cron.weekly
drwxr-xr-x 5 root lp 4.0K Sep 13 08:43 cups
drwxr-xr-x 2 root root 4.0K Feb 21 2024 cupshelpers
drwxr-xr-x 4 root root 4.0K Feb 21 2024 dbus-1
drwxr-xr-x 4 root root 4.0K Feb 21 2024 dconf
-rw-r--r-- 1 root root 2.9K Feb 20 2022 debconf.conf
-rw-r--r-- 1 root root 13 Aug 22 2021 debian_version
drwxr-xr-x 3 root root 4.0K Sep 6 06:34 default
temp.txt
```

## Searching:

- `find . -name temp.txt`: Searches for temp.txt in the current directory.
- `sudo find / -name temp.txt 2>/dev/null`: Searches for temp.txt across the entire system, suppressing permission denied errors.

```
./Desktop/rte.txt
(base) tazmeen@afroz:~$ find / -name "*.pdf"
find: '/root': Permission denied
find: '/lost+found': Permission denied
find: '/var/cache/apt/archives/partial': Permission denied
find: '/var/cache/ldconfig': Permission denied
find: '/var/cache/cups': Permission denied
find: '/var/cache/apparmor/0012d2a9.0': Permission denied
find: '/var/cache/apparmor/7a03f264.0': Permission denied
find: '/var/cache/private': Permission denied
find: '/var/lib/ubuntu-advantage/apt-esm/var/lib/apt/lists/partial': Permission denied
find: '/var/lib/fwupd/gnupg': Permission denied
find: '/var/lib/udisks2': Permission denied
find: '/var/lib/openvpn/chroot': Permission denied
find: '/var/lib/update-notifier/package-data-downloads/partial': Permission denied
find: '/var/lib/saned': Permission denied
find: '/var/lib/fprint': Permission denied
find: '/var/lib/gdm3': Permission denied
find: '/var/lib/polkit-1': Permission denied
find: '/var/lib/apt/lists/partial': Permission denied
find: '/var/lib/AccountsService/users': Permission denied
find: '/var/lib/snapd/cache': Permission denied
find: '/var/lib/snapd/cookie': Permission denied
find: '/var/lib/snapd/void': Permission denied
find: '/var/lib/NetworkManager': Permission denied
find: '/var/lib/bluetooth/4C:34:88:56:B4:9E': Permission denied
find: '/var/lib/private': Permission denied
```

```
tazmeen@afroz: ~/Desktop
(base) tazmeen@afroz:~/Desktop$ sudo find / -name "*.pdf"
[sudo] password for tazmeen:
find: '/run/user/1000/doc': Permission denied
find: '/run/user/1000/gvfs': Permission denied
(base) tazmeen@afroz:~/Desktop$
```

Here, `2>/dev/null` redirects error output to null, suppressing the permission denied messages.

```
./temp.txt
(base) tazmeen@afroz:~/Desktop/main$ sudo find / -name "*.pdf" 2>/dev/null
/usr/lib/libreoffice/share/xpdfimport/xpdfimport_err.pdf
/usr/lib/cups/filter/wmftopdf
/usr/lib/cups/filter/bannertopdf
/usr/lib/cups/filter/imagetopdf
/usr/lib/cups/filter/gstopdf
/usr/lib/cups/filter/vectortopdf
/usr/lib/cups/filter/texttopdf
/usr/lib/cups/filter/rastertopdf
/usr/lib/cups/filter/svgtopdf
/usr/lib/cups/filter/cgmtopdf
/usr/lib/cups/filter/pdftopdf
/usr/lib/cups/filter/xfigtopdf
/usr/lib/cups/filter/cmxtopdf
/usr/lib/cups/filter/emftopdf
/usr/share/cups/data/classified.pdf
/usr/share/cups/data/default-testpage.pdf
/usr/share/cups/data/secret.pdf
/usr/share/cups/data/form_russian.pdf
/usr/share/cups/data/form_english.pdf
/usr/share/cups/data/default.pdf
/usr/share/cups/data/topsecret.pdf
/usr/share/cups/data/confidential.pdf
/usr/share/cups/data/unclassified.pdf
/usr/share/cups/data/standard.pdf
```

. will find the file in the current directory

```
./temp.txt
(base) tazmeen@afroz:~/Desktop/main$ sudo find . -name "*.txt"
./main.txt
./temp.txt
./file_soft.txt
./soft.txt
(base) tazmeen@afroz:~/Desktop/main$
```

locate command

## Locate Command:

- locate temp.txt: Quickly finds the location of temp.txt using a pre-built database.

```
base) tazmeen@afroz:~/Desktop/main$ locate "*.pdf"
ome/tazmeen/quiz2.pdf
ome/tazmeen/.local/share/Trash/files/White and Grey Modern Business Research Proposal Presentation-1-1.pdf
ome/tazmeen/.local/share/Trash/files/White and Grey Modern Business Research Proposal Presentation-1-2.pdf
ome/tazmeen/.local/share/Trash/files/White and Grey Modern Business Research Proposal Presentation-1.pdf
ome/tazmeen/Desktop/Lab#04.pdf
ome/tazmeen/Documents/22P-9252-OS-LAB-TASK-2.pdf
ome/tazmeen/Documents/22P-9252-OS-LAB-TASK-3.pdf
ome/tazmeen/Downloads/Lab # 03.pdf
ome/tazmeen/Downloads/Lab#01.pdf
ome/tazmeen/Downloads/Lab#02.pdf
ome/tazmeen/Downloads/Lab#04.pdf
ome/tazmeen/Downloads/TBW.pdf
ome/tazmeen/Downloads/White and Grey Modern Business Research Proposal Presentation.pdf
ome/tazmeen/Downloads/kovacs_et_al_labmanual_manuscript.pdf
ome/tazmeen/Downloads/quiz1.pdf
ome/tazmeen/Downloads/quiz2.pdf
ome/tazmeen/Downloads/tesstt.pdf
ome/tazmeen/anaconda3/lib/python3.12/site-packages/matplotlib/mpl-data/images/back.pdf
ome/tazmeen/anaconda3/lib/python3.12/site-packages/matplotlib/mpl-data/images/filesave.pdf
ome/tazmeen/anaconda3/lib/python3.12/site-packages/matplotlib/mpl-data/images/forward.pdf
ome/tazmeen/anaconda3/lib/python3.12/site-packages/matplotlib/mpl-data/images/hand.pdf
ome/tazmeen/anaconda3/lib/python3.12/site-packages/matplotlib/mpl-data/images/help.pdf
ome/tazmeen/anaconda3/lib/python3.12/site-packages/matplotlib/mpl-data/images/home.pdf
ome/tazmeen/anaconda3/lib/python3.12/site-packages/matplotlib/mpl-data/images/matplotlib.pdf
ome/tazmeen/anaconda3/lib/python3.12/site-packages/matplotlib/mpl-data/images/move.pdf
ome/tazmeen/anaconda3/lib/python3.12/site-packages/matplotlib/mpl-data/images/qt4_editor_options.pdf
ome/tazmeen/anaconda3/lib/python3.12/site-packages/matplotlib/mpl-data/images/subplots.pdf
ome/tazmeen/anaconda3/lib/python3.12/site-packages/matplotlib/mpl-data/images/zoom_to_rect.pdf
ome/tazmeen/anaconda3/pkgs/binaryornot-0.4.4-pyhd3eb1b0_1/info/test/tests/isBinaryFile/pdf.pdf
ome/tazmeen/anaconda3/pkgs/libcups-2.4.2-h2d74bed_1/share/cups/ippool/document-a4.pdf
ome/tazmeen/anaconda3/pkgs/libcups-2.4.2-h2d74bed_1/share/cups/ippool/document-letter.pdf
ome/tazmeen/anaconda3/pkgs/libcups-2.4.2-h2d74bed_1/share/cups/ippool/onepage-a4.pdf
ome/tazmeen/anaconda3/pkgs/libcups-2.4.2-h2d74bed_1/share/cups/ippool/onepage-letter.pdf
ome/tazmeen/anaconda3/pkgs/libcups-2.4.2-h2d74bed_1/share/cups/ippool/testfile.pdf
```