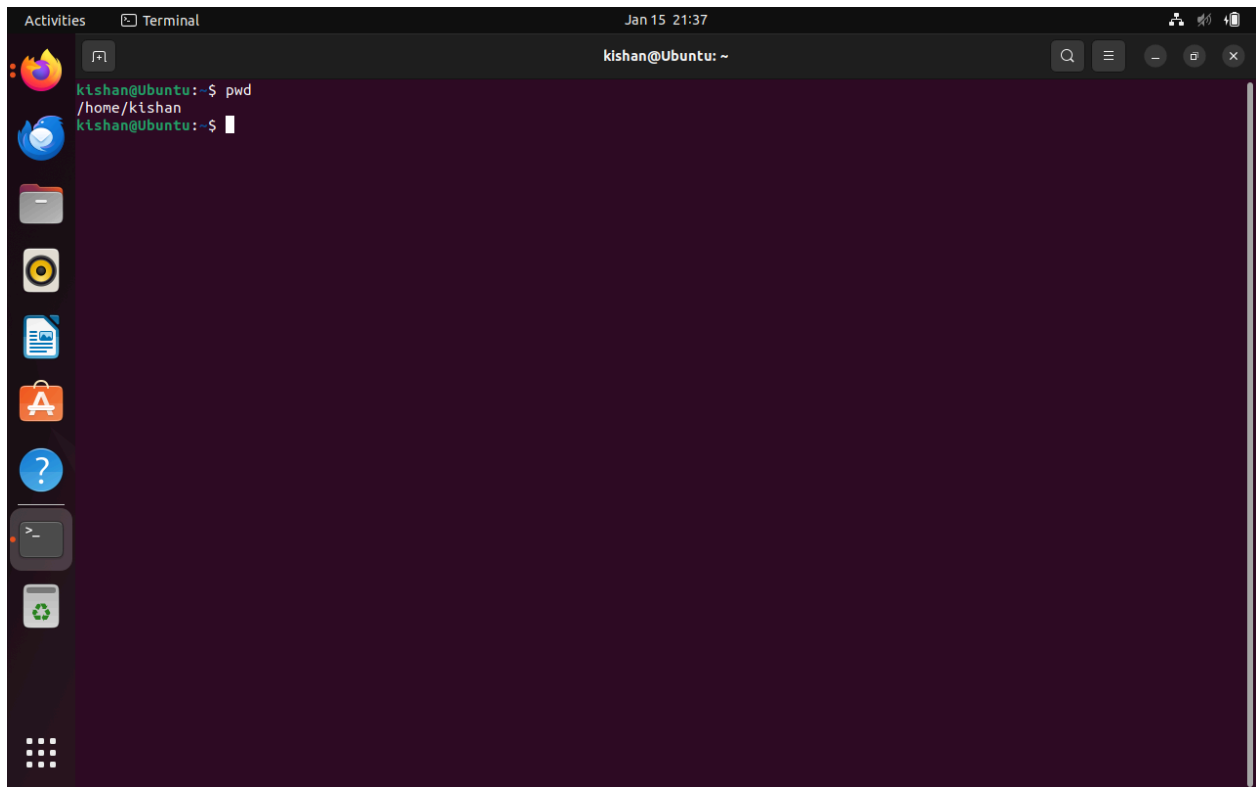


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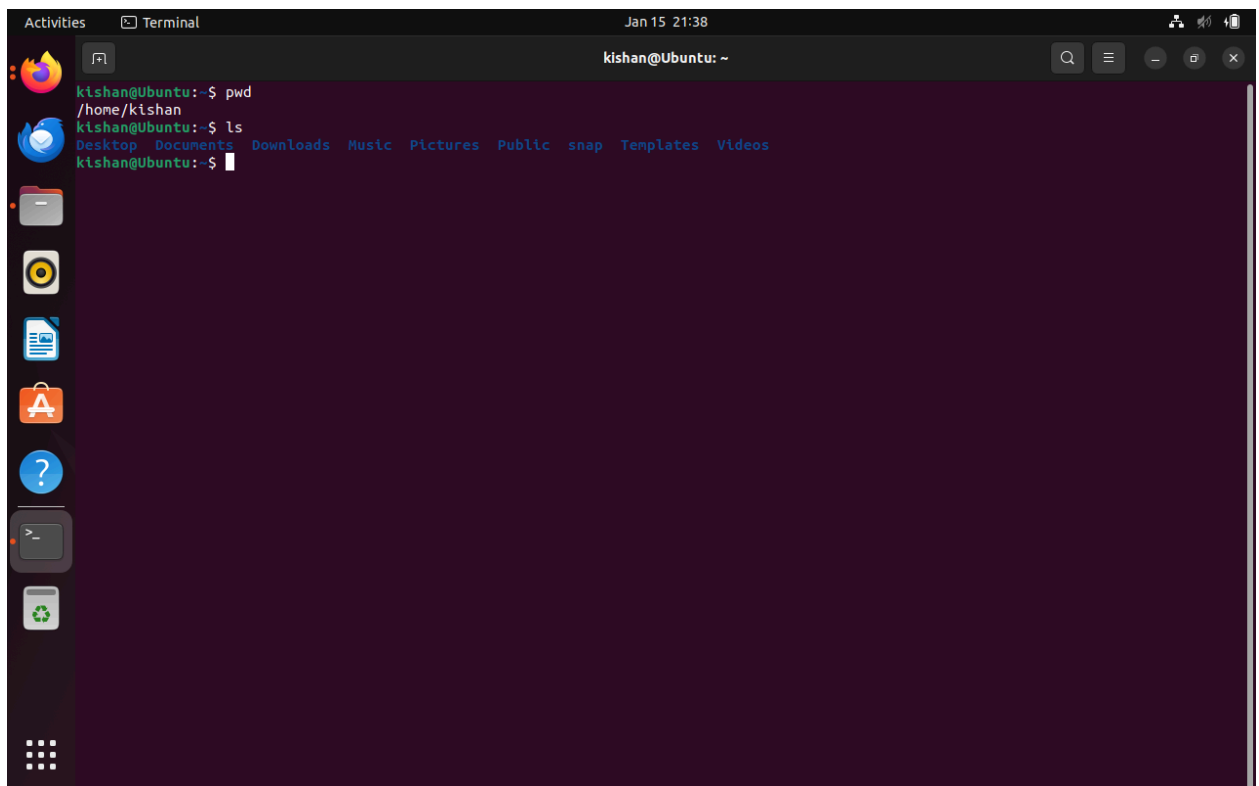
1) pwd



A terminal window titled "Terminal" with the username "kishan@Ubuntu: ~". The window shows the command "pwd" being entered and executed. The output is "/home/kishan". The terminal has a dark purple background and a light blue prompt. The window's title bar includes "Activities", "Terminal", and the date "Jan 15 21:37". The window's status bar includes "kishan@Ubuntu: ~", a search icon, and window control buttons.

```
kishan@Ubuntu:~$ pwd
/home/kishan
kishan@Ubuntu:~$
```

2) ls

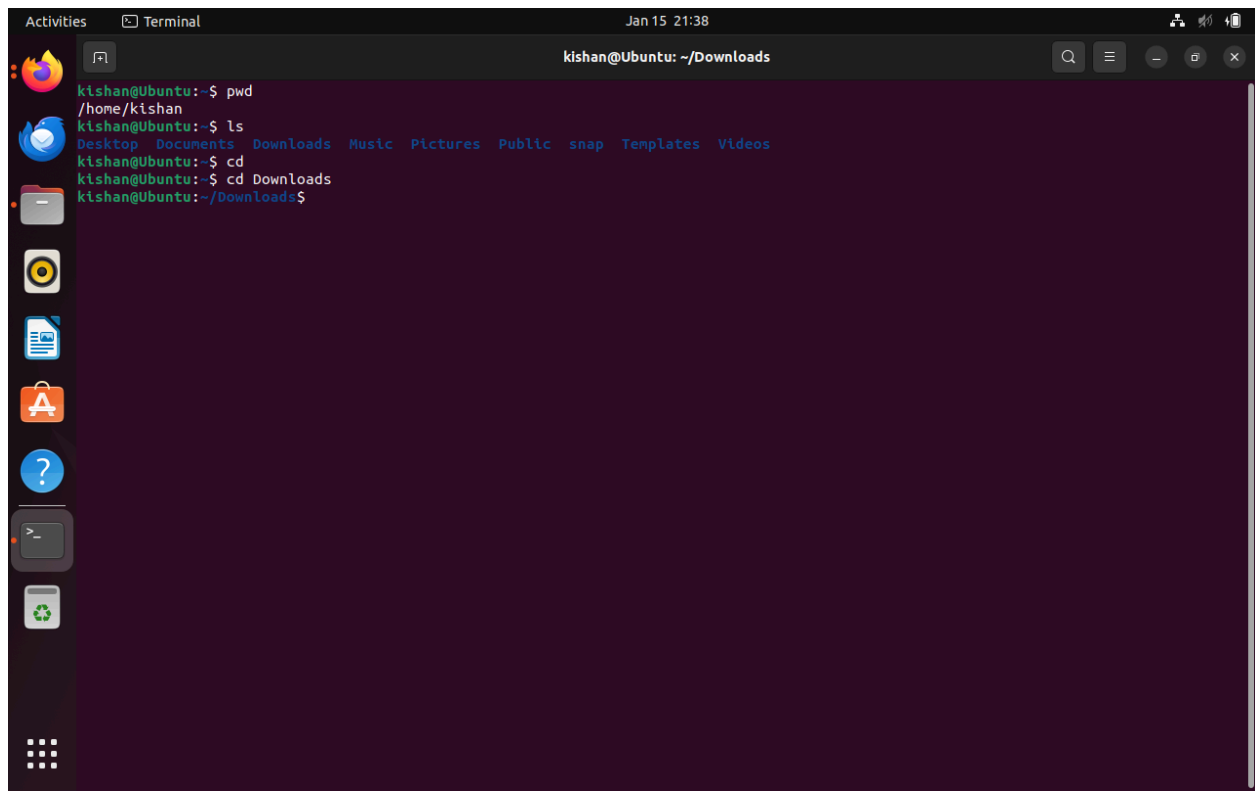


A terminal window titled "Terminal" with the username "kishan@Ubuntu: ~". The window shows the command "ls" being entered and executed. The output is "Desktop Documents Downloads Music Pictures Public snap Templates Videos". The terminal has a dark purple background and a light blue prompt. The window's title bar includes "Activities", "Terminal", and the date "Jan 15 21:38". The window's status bar includes "kishan@Ubuntu: ~", a search icon, and window control buttons.

```
kishan@Ubuntu:~$ pwd
/home/kishan
kishan@Ubuntu:~$ ls
Desktop Documents Downloads Music Pictures Public snap Templates Videos
kishan@Ubuntu:~$
```

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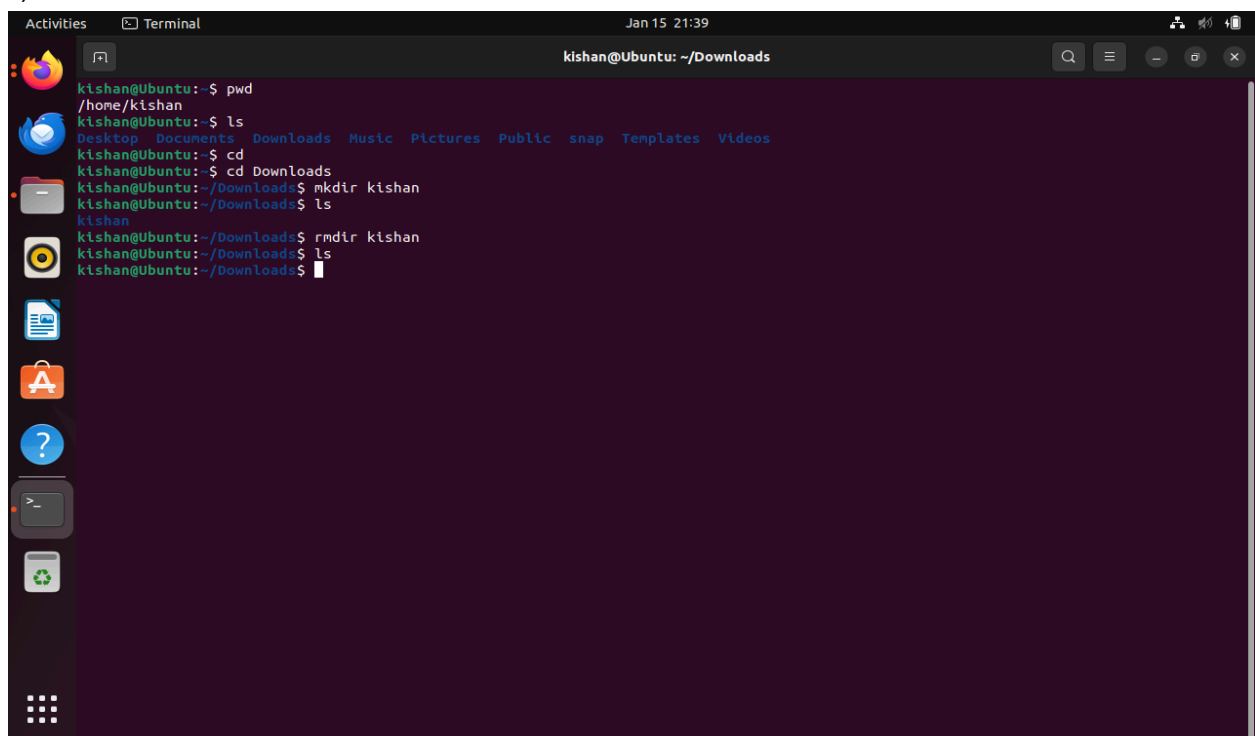
3)



A terminal window titled "kishan@Ubuntu: ~/Downloads" showing the following commands and output:

```
kishan@Ubuntu:~$ pwd
/home/kishan
kishan@Ubuntu:~$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  snap  Templates  Videos
kishan@Ubuntu:~$ cd
kishan@Ubuntu:~$ cd Downloads
kishan@Ubuntu:~/Downloads$
```

4)

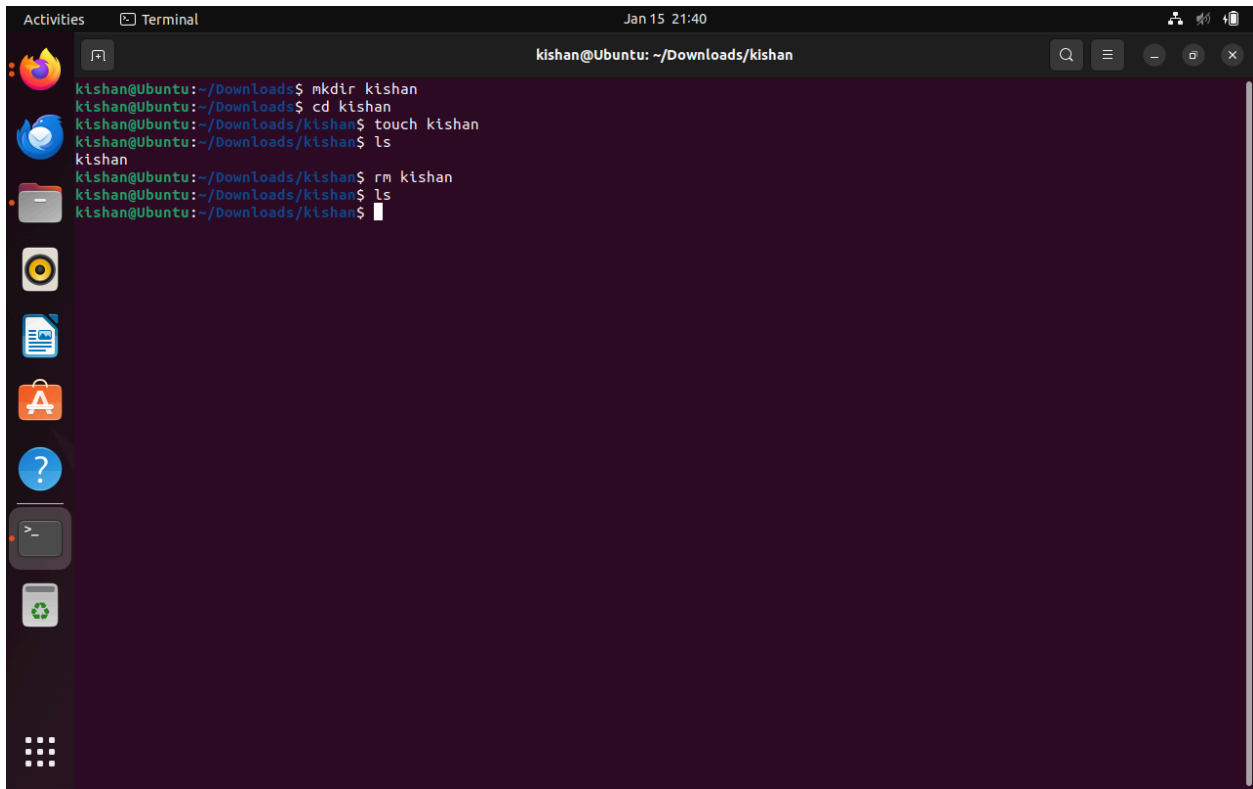


A terminal window titled "kishan@Ubuntu: ~/Downloads" showing the following commands and output:

```
kishan@Ubuntu:~$ pwd
/home/kishan
kishan@Ubuntu:~$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  snap  Templates  Videos
kishan@Ubuntu:~$ cd
kishan@Ubuntu:~$ cd Downloads
kishan@Ubuntu:~/Downloads$ mkdir kishan
kishan@Ubuntu:~/Downloads$ ls
kishan
kishan@Ubuntu:~/Downloads$ rmdir kishan
kishan@Ubuntu:~/Downloads$ ls
kishan@Ubuntu:~/Downloads$
```

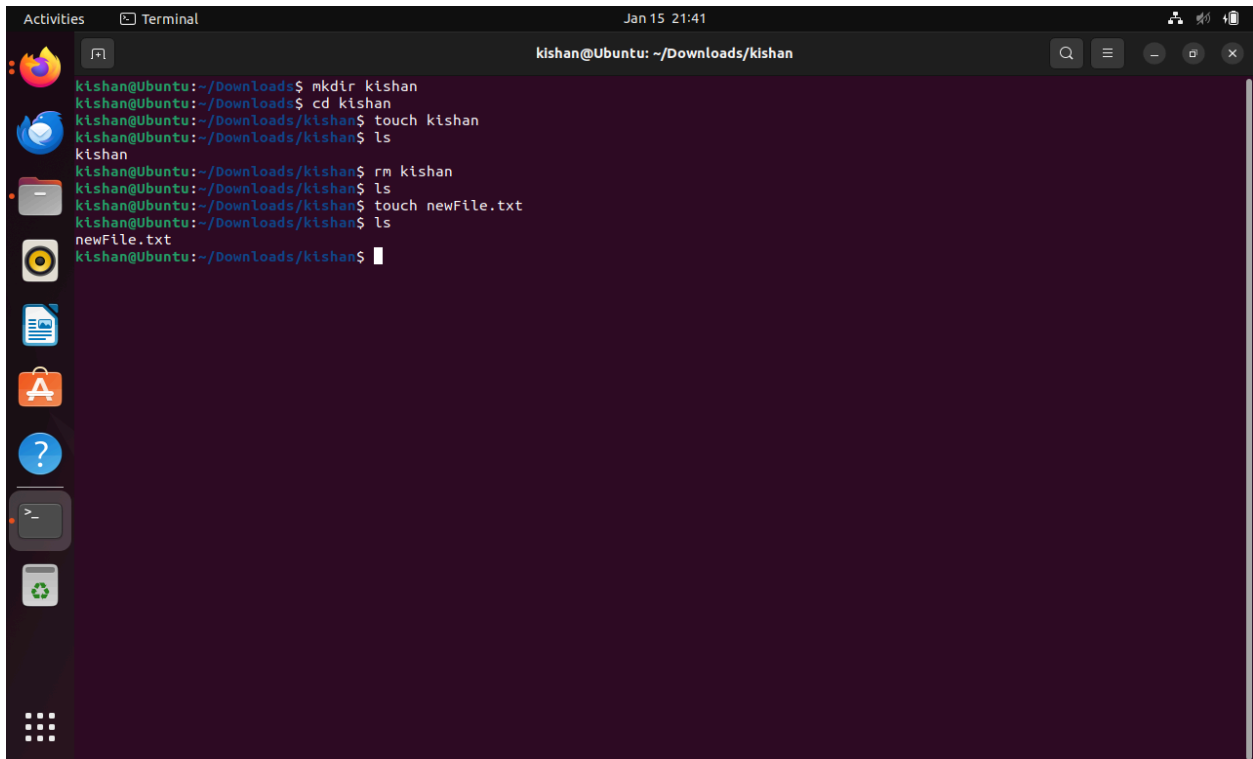
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5)

A terminal window titled 'kishan@Ubuntu: ~/Downloads/kishan' showing a sequence of commands to create, touch, and remove a directory named 'kishan'. The terminal output shows the directory being created, its contents listed (empty), touched, and then removed. The window includes a sidebar with application icons and a top bar with system status.

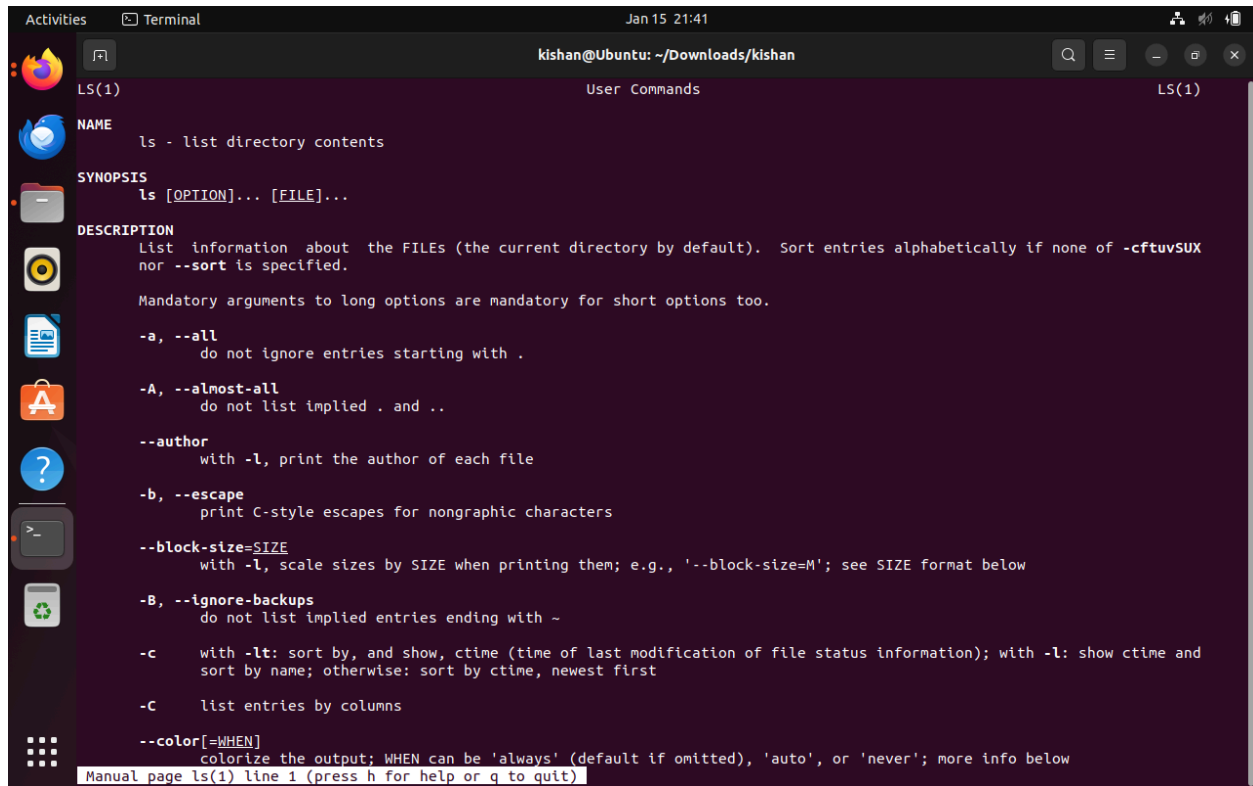
```
kishan@Ubuntu:~/Downloads$ mkdir kishan
kishan@Ubuntu:~/Downloads$ cd kishan
kishan@Ubuntu:~/Downloads/kishan$ touch kishan
kishan@Ubuntu:~/Downloads/kishan$ ls
kishan
kishan@Ubuntu:~/Downloads/kishan$ rm kishan
kishan@Ubuntu:~/Downloads/kishan$ ls
kishan@Ubuntu:~/Downloads/kishan$
```

6)

A terminal window titled 'kishan@Ubuntu: ~/Downloads/kishan' showing a sequence of commands to create, touch, and remove a directory named 'kishan', and then create and touch a file named 'newFile.txt'. The terminal output shows the directory being created, its contents listed (empty), touched, and then removed. Then, a new file 'newFile.txt' is created and touched. The window includes a sidebar with application icons and a top bar with system status.

```
kishan@Ubuntu:~/Downloads$ mkdir kishan
kishan@Ubuntu:~/Downloads$ cd kishan
kishan@Ubuntu:~/Downloads/kishan$ touch kishan
kishan@Ubuntu:~/Downloads/kishan$ ls
kishan
kishan@Ubuntu:~/Downloads/kishan$ rm kishan
kishan@Ubuntu:~/Downloads/kishan$ ls
kishan@Ubuntu:~/Downloads/kishan$ touch newFile.txt
kishan@Ubuntu:~/Downloads/kishan$ ls
newFile.txt
kishan@Ubuntu:~/Downloads/kishan$
```

7)



A terminal window titled "kishan@Ubuntu: ~/Downloads/kishan" showing the man page for the 'ls' command. The window has a dark purple background with a sidebar on the left containing icons for various applications. The terminal text is as follows:

```
LS(1) User Commands LS(1)

NAME
  ls - list directory contents

SYNOPSIS
  ls [OPTION]... [FILE]...

DESCRIPTION
  List information about the FILES (the current directory by default). Sort entries alphabetically if none of -cftuvSUX
  nor --sort is specified.

  Mandatory arguments to long options are mandatory for short options too.

  -a, --all
    do not ignore entries starting with .

  -A, --almost-all
    do not list implied . and ..

  --author
    with -l, print the author of each file

  -b, --escape
    print C-style escapes for nongraphic characters

  --block-size=SIZE
    with -l, scale sizes by SIZE when printing them; e.g., '--block-size=M'; see SIZE format below

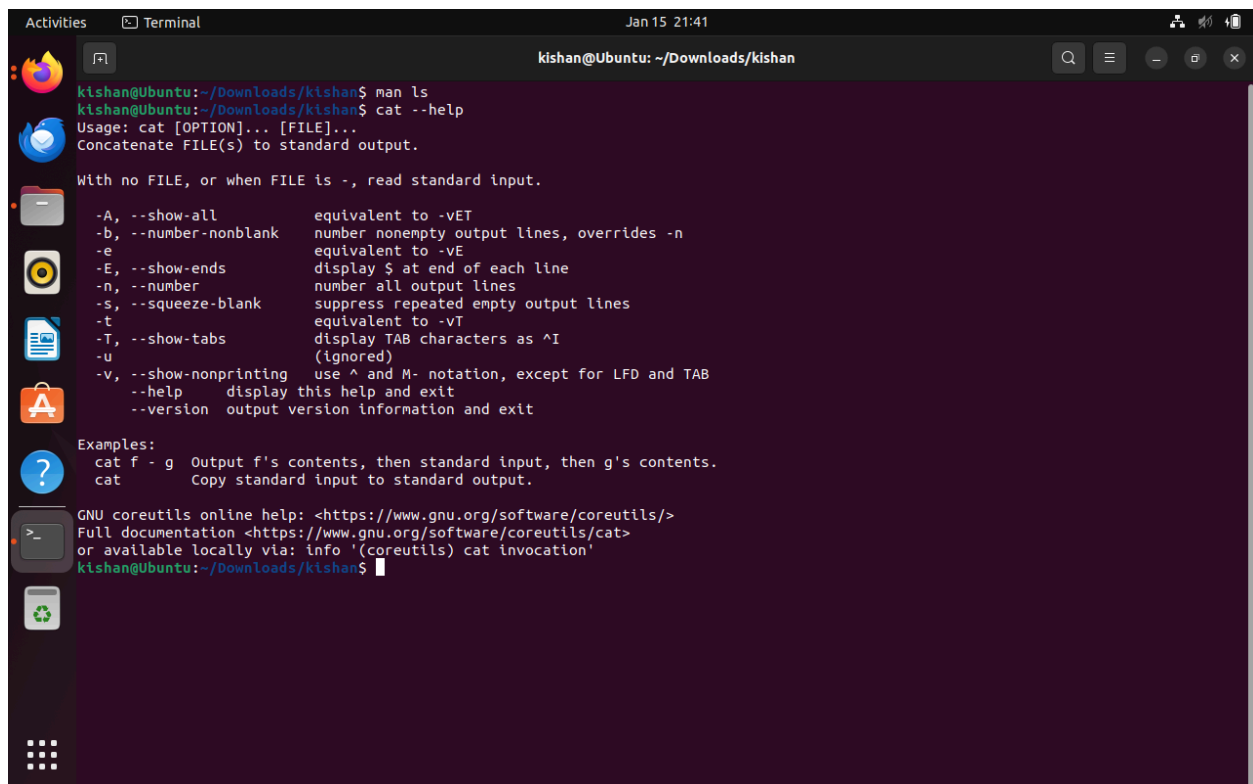
  -B, --ignore-backups
    do not list implied entries ending with ~

  -c
    with -lt: sort by, and show, ctime (time of last modification of file status information); with -l: show ctime and
    sort by name; otherwise: sort by ctime, newest first

  -C
    list entries by columns

  --color[=WHEN]
    colorize the output; WHEN can be 'always' (default if omitted), 'auto', or 'never'; more info below

Manual page ls(1) line 1 (press h for help or q to quit)
```



A terminal window titled "kishan@Ubuntu: ~/Downloads/kishan" showing the man page for the 'cat' command. The window has a dark purple background with a sidebar on the left containing icons for various applications. The terminal text is as follows:

```
kishan@Ubuntu:~/Downloads/kishan$ man ls
kishan@Ubuntu:~/Downloads/kishan$ cat --help
Usage: cat [OPTION]... [FILE]...
Concatenate FILE(s) to standard output.

With no FILE, or when FILE is -, read standard input.

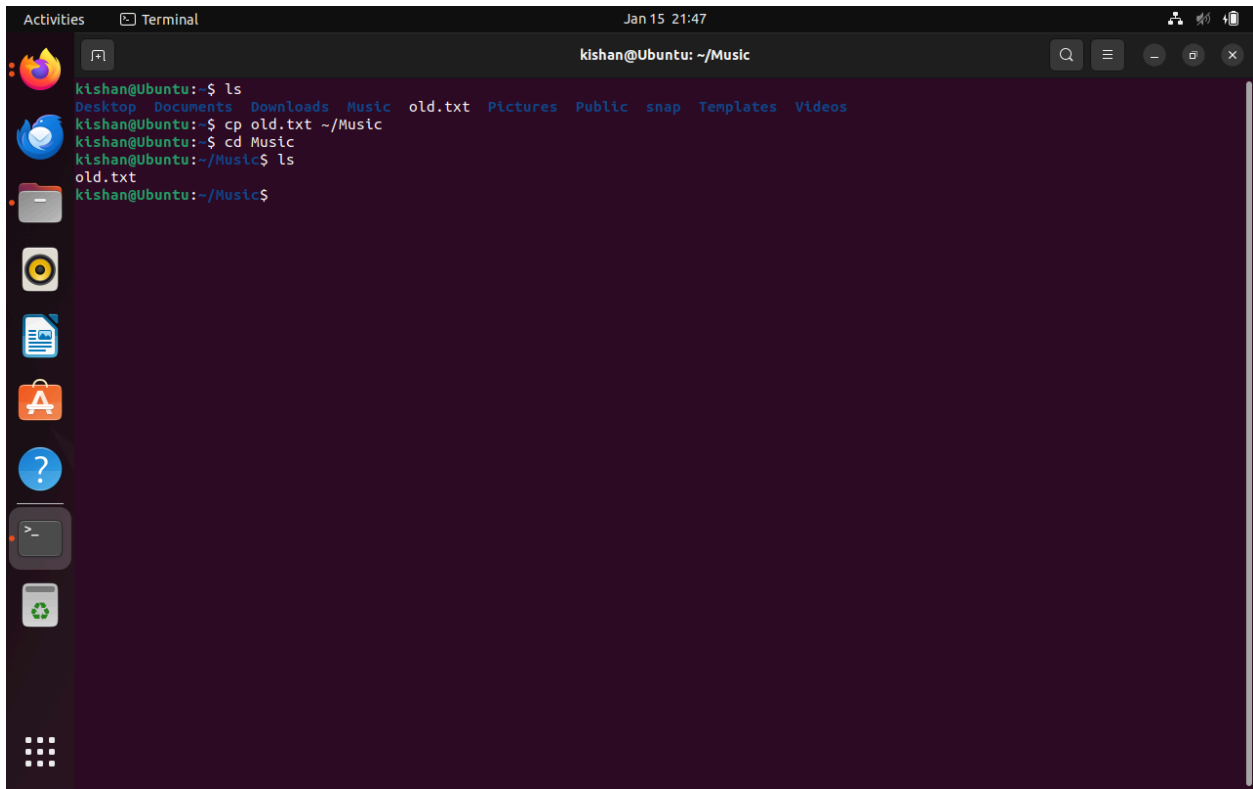
  -A, --show-all           equivalent to -vET
  -b, --number-nonblank    number nonempty output lines, overrides -n
  -e                       equivalent to -vE
  -E, --show-ends          display $ at end of each line
  -n, --number             number all output lines
  -s, --squeeze-blank      suppress repeated empty output lines
  -t                       equivalent to -vT
  -T, --show-tabs          display TAB characters as ^I
  -u                       (ignored)
  -v, --show-nonprinting   use ^ and M- notation, except for LFD and TAB
  --help                  display this help and exit
  --version               output version information and exit

Examples:
  cat f - g               Output f's contents, then standard input, then g's contents.
  cat                     Copy standard input to standard output.

GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Full documentation <https://www.gnu.org/software/coreutils/cat>
or available locally via: info '(coreutils) cat invocation'
kishan@Ubuntu:~/Downloads/kishan$
```

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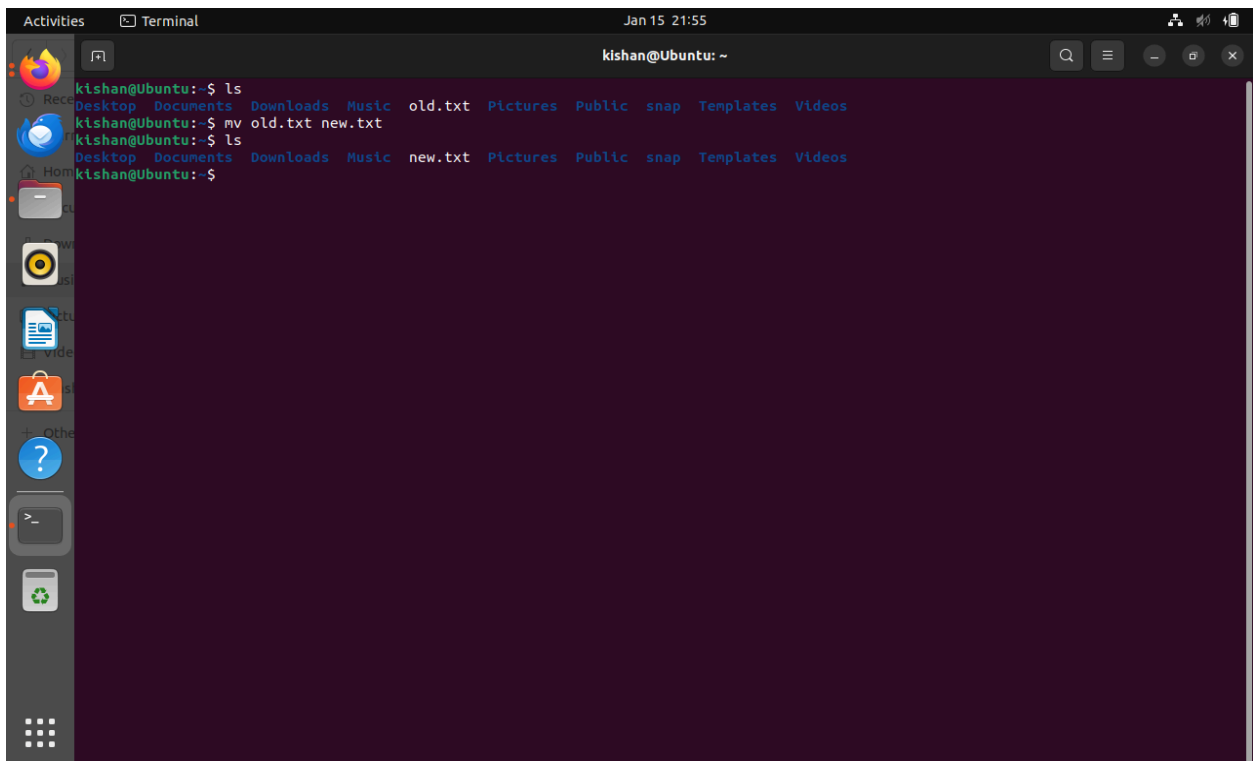
8)



A terminal window titled "kishan@Ubuntu: ~/Music" showing the following commands and output:

```
kishan@Ubuntu:~$ ls
Desktop  Documents  Downloads  Music  old.txt  Pictures  Public  snap  Templates  Videos
kishan@Ubuntu:~$ cp old.txt ~/Music
kishan@Ubuntu:~$ cd Music
kishan@Ubuntu:~/Music$ ls
old.txt
kishan@Ubuntu:~/Music$
```

9)

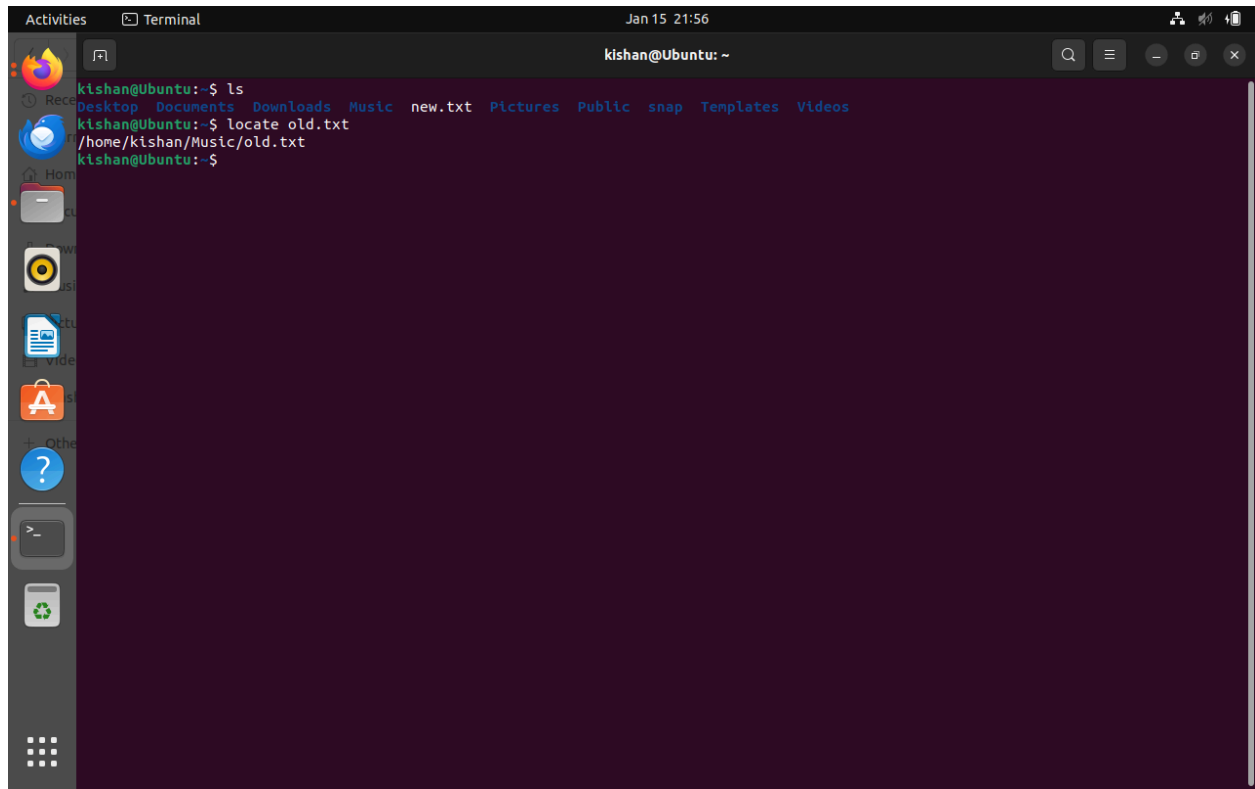


A terminal window titled "kishan@Ubuntu: ~" showing the following commands and output:

```
kishan@Ubuntu:~$ ls
Desktop  Documents  Downloads  Music  old.txt  Pictures  Public  snap  Templates  Videos
kishan@Ubuntu:~$ mv old.txt new.txt
kishan@Ubuntu:~$ ls
Desktop  Documents  Downloads  Music  new.txt  Pictures  Public  snap  Templates  Videos
kishan@Ubuntu:~$
```

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10)

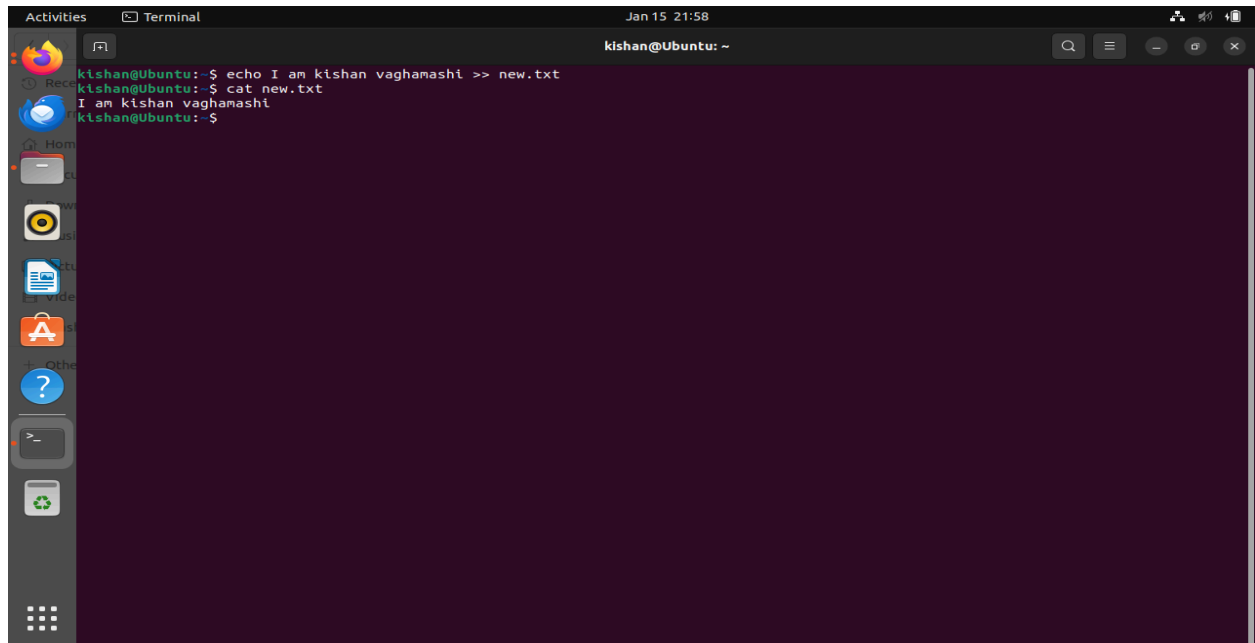
A terminal window titled 'kishan@Ubuntu: ~' with a dark purple background. The terminal shows the following commands and output:

```
kishan@Ubuntu:~$ ls
Desktop  Documents  Downloads  Music  new.txt  Pictures  Public  snap  Templates  Videos
kishan@Ubuntu:~$ locate old.txt
/home/kishan/Music/old.txt
kishan@Ubuntu:~$
```

The left sidebar of the Ubuntu desktop is visible, showing icons for various applications and system utilities.

Intermediate Commands

1)

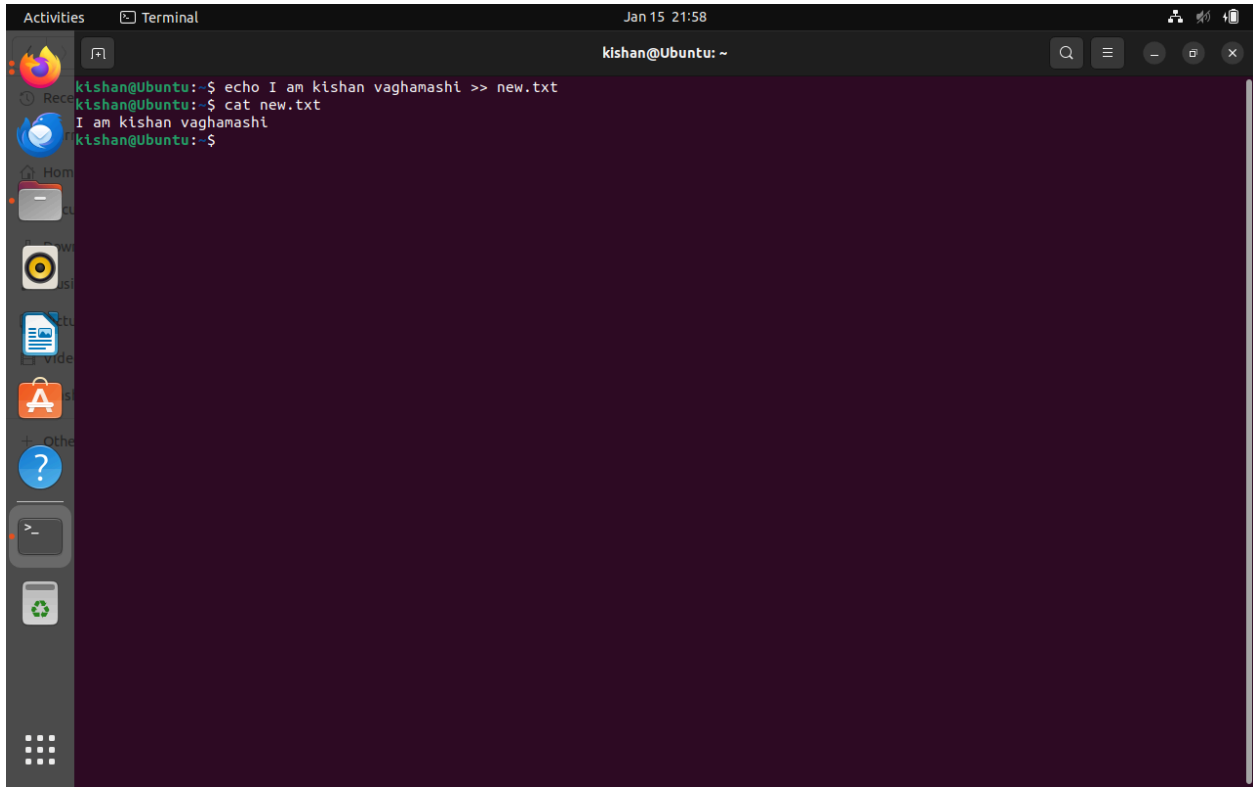
A terminal window titled 'kishan@Ubuntu: ~' with a dark purple background. The terminal shows the following commands and output:

```
kishan@Ubuntu:~$ echo I am kishan vaghamashi >> new.txt
kishan@Ubuntu:~$ cat new.txt
I am kishan vaghamashi
kishan@Ubuntu:~$
```

The left sidebar of the Ubuntu desktop is visible, showing icons for various applications and system utilities.

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2)



A terminal window titled "kishan@Ubuntu: ~" with a search bar and window controls. The terminal shows the following commands and output:

```
kishan@Ubuntu:~$ echo I am kishan vaghamashi >> new.txt
kishan@Ubuntu:~$ cat new.txt
I am kishan vaghamashi
kishan@Ubuntu:~$
```

The left sidebar of the desktop environment shows icons for the Dash, Home, Files, Music, Videos, Applications, and a search icon.

3)



A terminal window titled "kishan@Ubuntu: ~" with a search bar and window controls. The terminal shows the following commands and output:

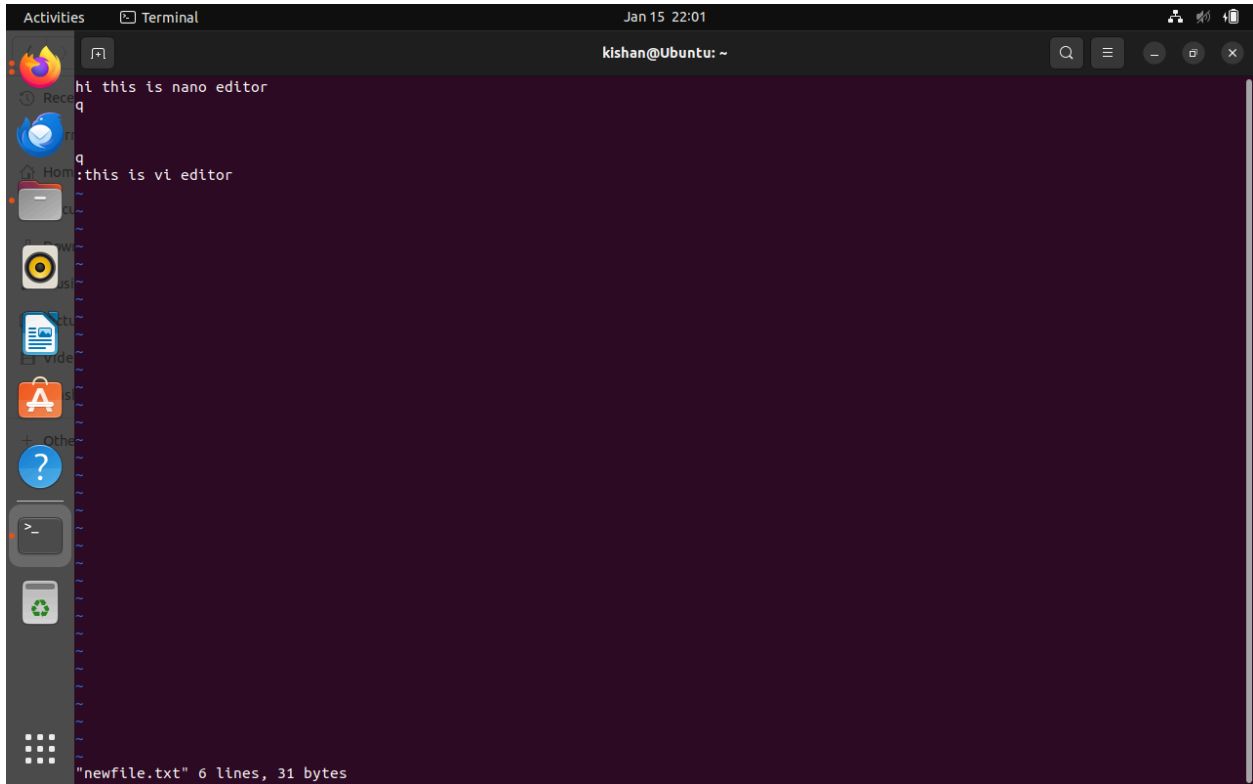
```
GNU nano 6.2 newfile.txt *
hi this is nano editor
```

The bottom of the terminal window displays a status bar with various keyboard shortcuts:

^G Help	^O Write Out	^W Where Is	^X Cut	^T Execute	^C Location	^U Undo	^M Set Mark
^X Exit	^R Read File	^N Replace	^U Paste	^D Justify	^V Go To Line	^E Redo	^O Copy

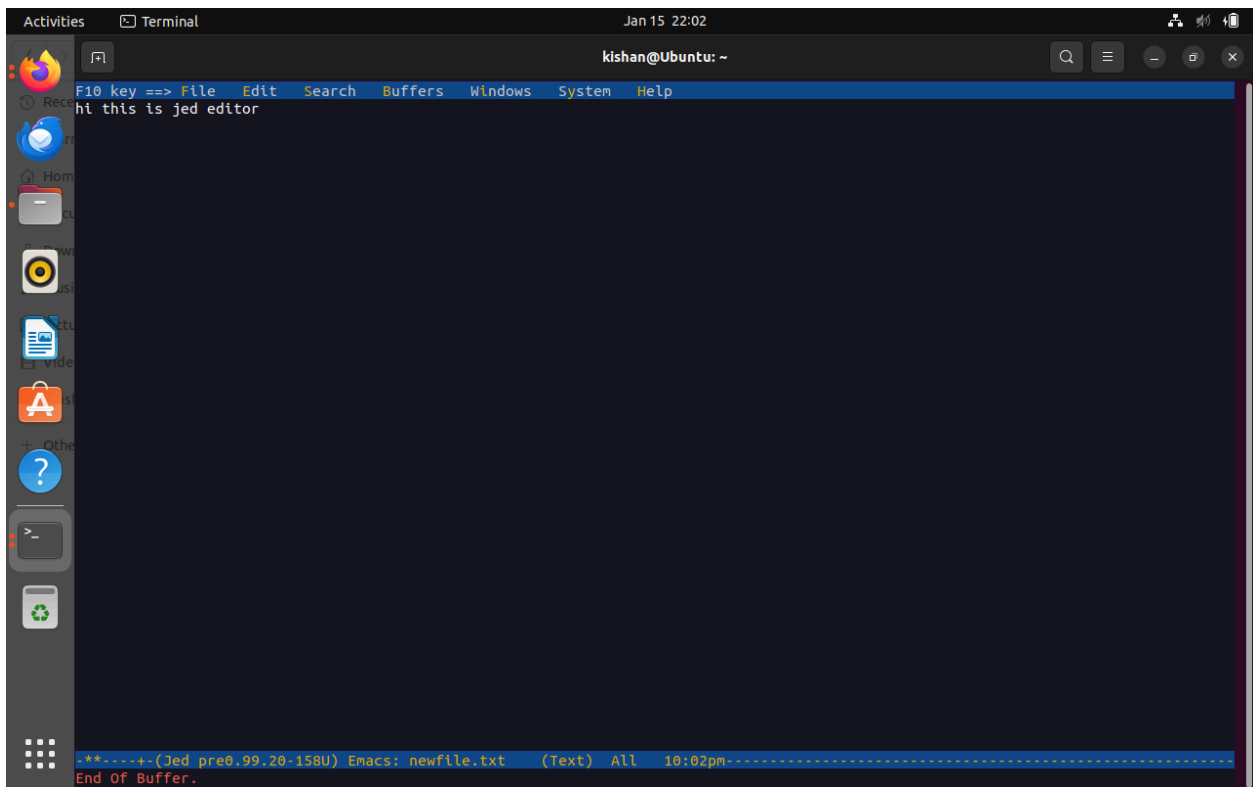
The left sidebar of the desktop environment shows icons for the Dash, Home, Files, Music, Videos, Applications, and a search icon.

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A screenshot of a terminal window titled "Terminal" with the date "Jan 15 22:01" and the user "kishan@Ubuntu: ~". The terminal shows the output of a command: "hi this is nano editor". The background is dark purple. The left sidebar shows various application icons. The bottom status bar indicates "newfile.txt" 6 lines, 31 bytes.

```
hi this is nano editor
```

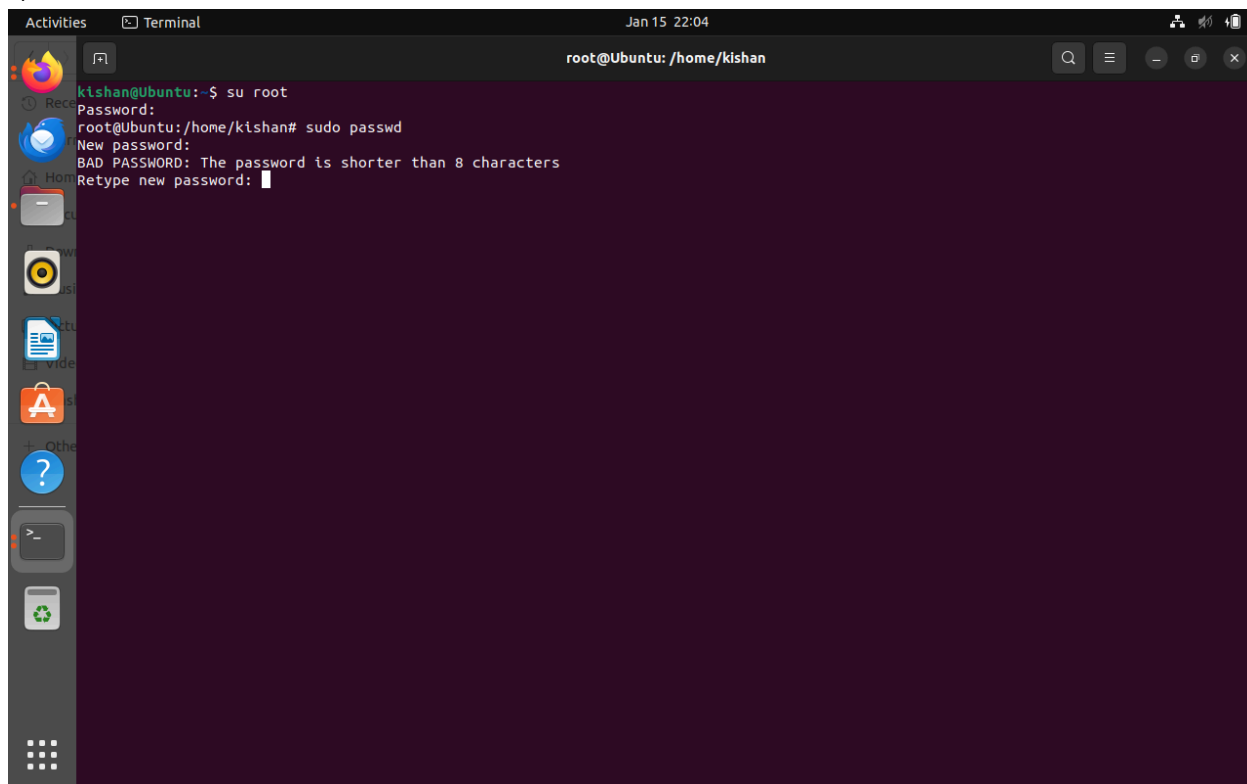


A screenshot of a terminal window titled "Terminal" with the date "Jan 15 22:02" and the user "kishan@Ubuntu: ~". The terminal shows the output of a command: "hi this is jed editor". The background is dark blue. The left sidebar shows various application icons. The bottom status bar indicates "Emacs: newfile.txt (Text) All 10:02pm".

```
hi this is jed editor
```

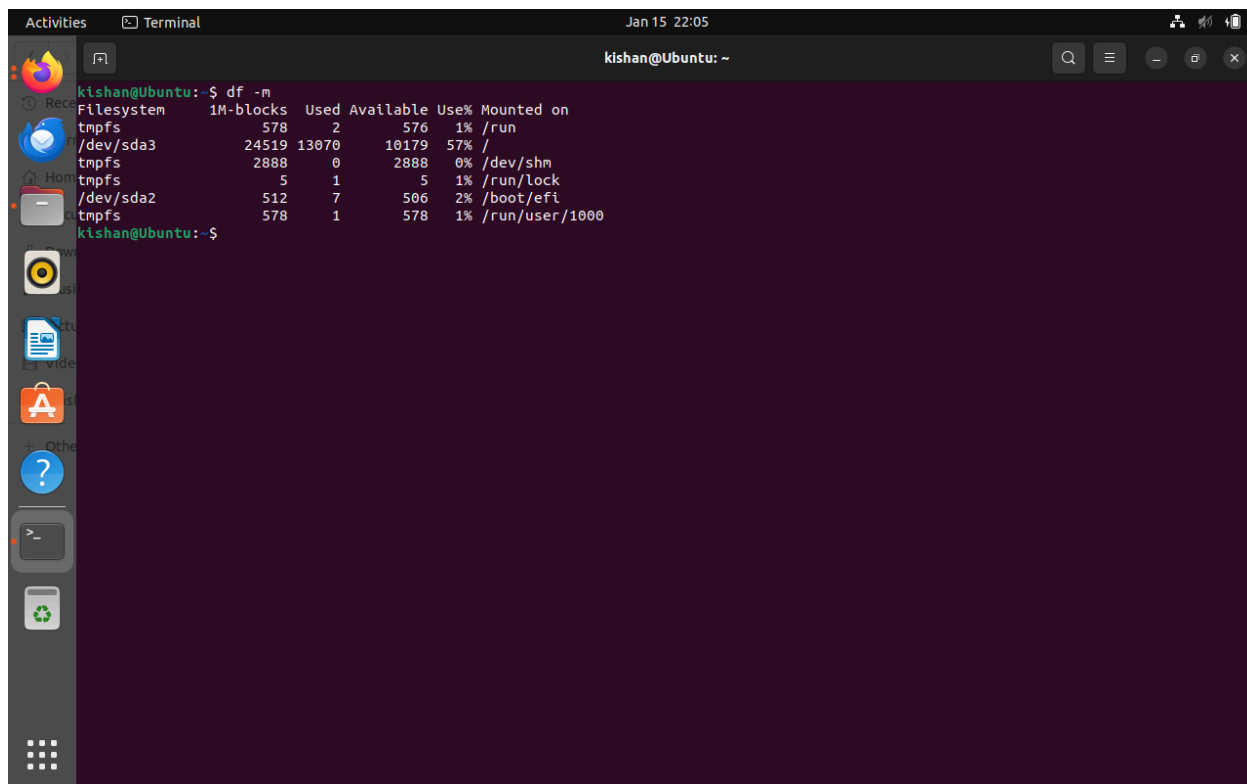

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4)

A terminal window titled 'Terminal' with the date 'Jan 15 22:04' and the user 'root@Ubuntu: /home/kishan'. The prompt is 'kishan@Ubuntu:~\$'. The user enters 'su root', followed by 'Password:'. Then they enter 'sudo passwd', followed by 'New password:', 'BAD PASSWORD: The password is shorter than 8 characters', and 'Retype new password:'.

```
kishan@Ubuntu:~$ su root
Password:
root@Ubuntu:/home/kishan# sudo passwd
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
```

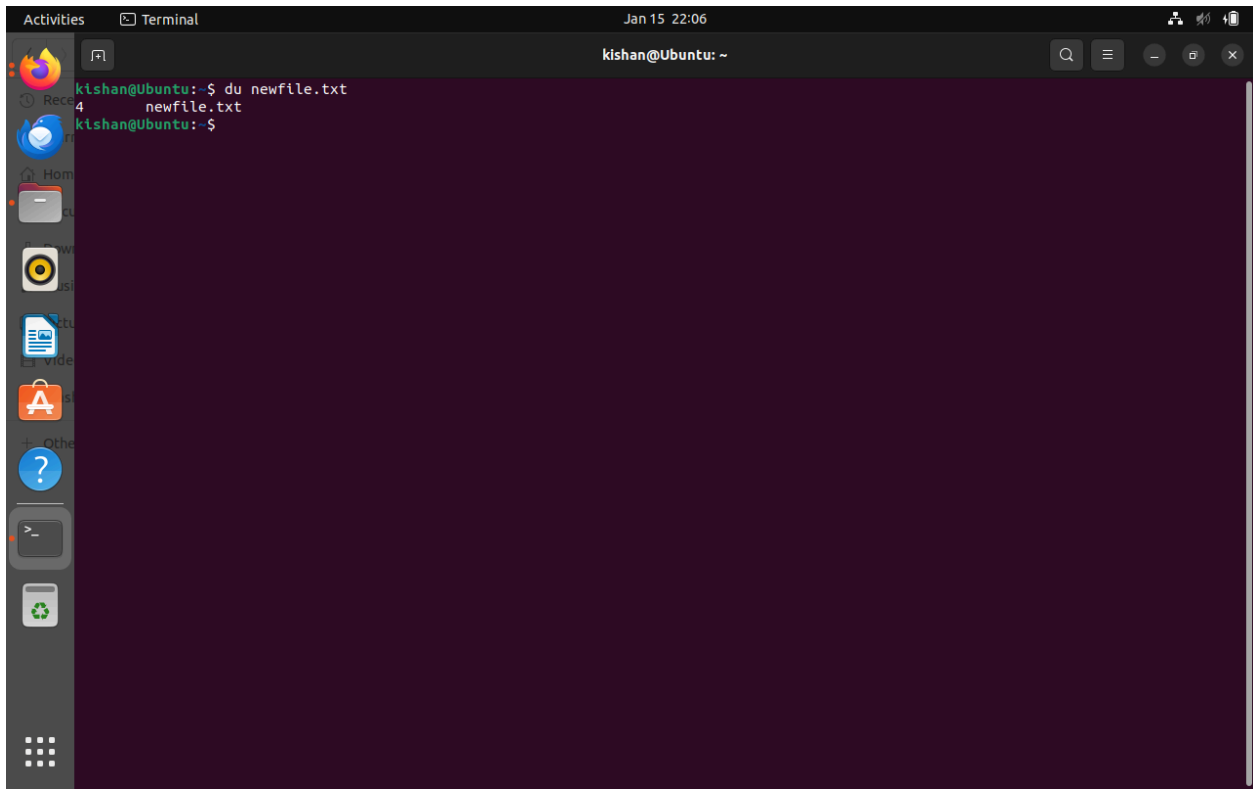
5)

A terminal window titled 'Terminal' with the date 'Jan 15 22:05' and the user 'kishan@Ubuntu: ~'. The prompt is 'kishan@Ubuntu:~\$'. The user enters 'df -m', which displays a table of disk usage for various filesystems.

```
kishan@Ubuntu:~$ df -m
Filesystem      1M-blocks    Used Available Use% Mounted on
tmpfs             578         2       576   1% /run
/dev/sda3      24519 13070      10179   57% /
tmpfs            2888         0      2888   0% /dev/shm
tmpfs              5         1         5   1% /run/lock
/dev/sda2        512         7         506   2% /boot/efi
tmpfs             578         1         578   1% /run/user/1000
kishan@Ubuntu:~$
```

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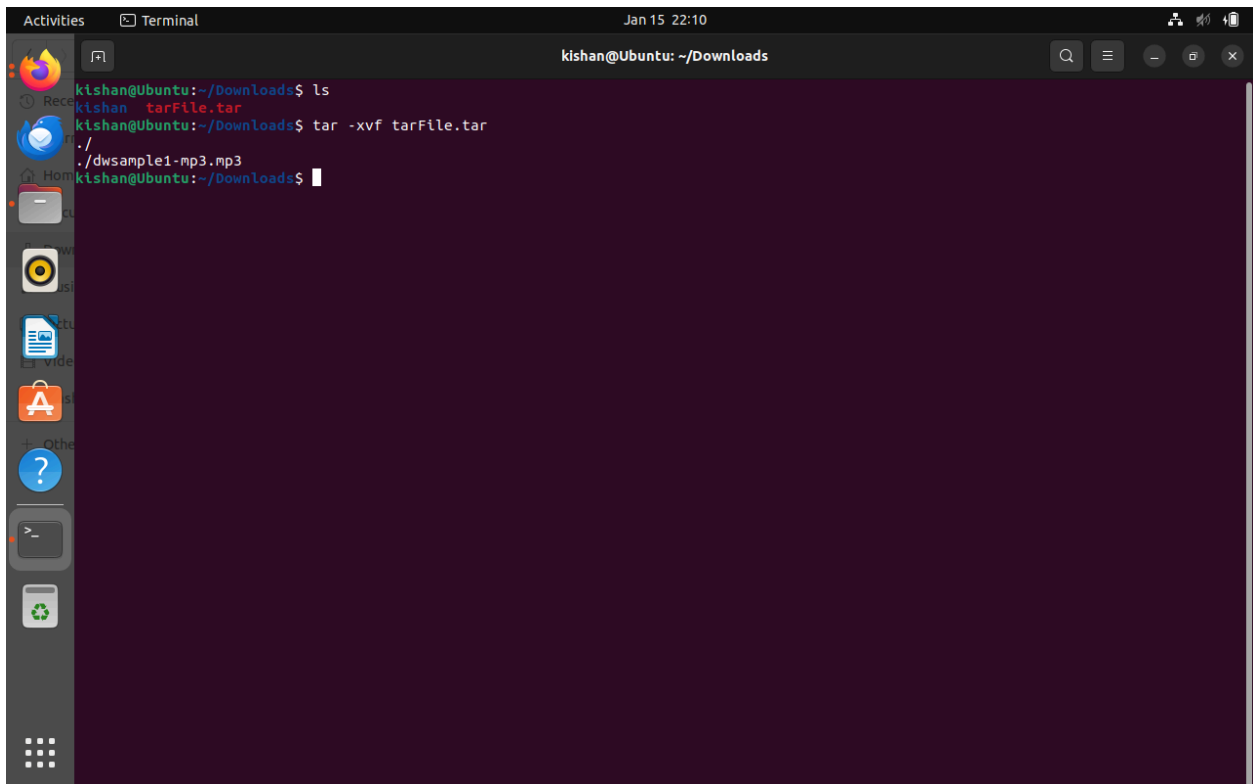
6)



A terminal window titled "kishan@Ubuntu: ~" with a dark purple background. The terminal shows the command `du newfile.txt` being executed, which outputs `4 newfile.txt`. The prompt `kishan@Ubuntu:~$` is visible at the bottom.

```
kishan@Ubuntu:~$ du newfile.txt
4 newfile.txt
kishan@Ubuntu:~$
```

7)

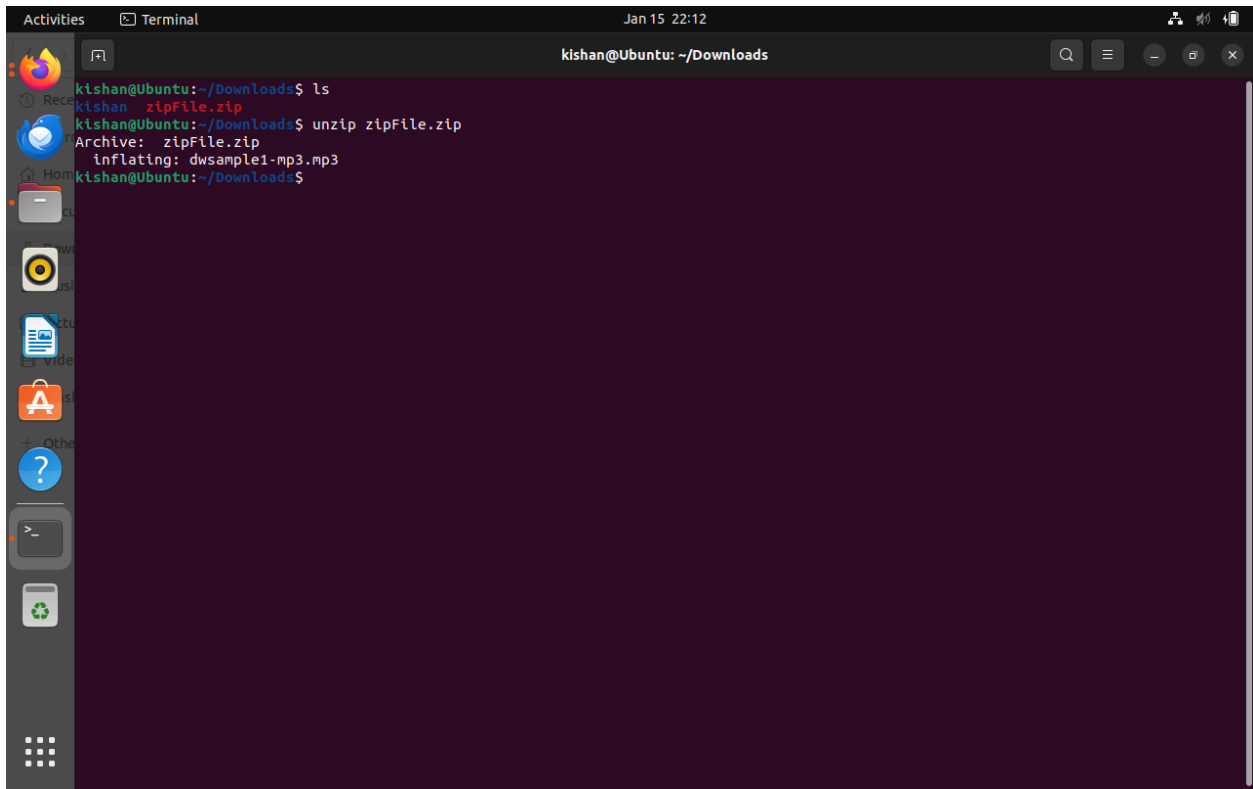


A terminal window titled "kishan@Ubuntu: ~/Downloads" with a dark purple background. The terminal shows the command `ls` being executed, which outputs `tarFile.tar`. Then, the command `tar -xvf tarFile.tar` is executed, which outputs `./dwsample1-mp3.mp3`. The prompt `kishan@Ubuntu:~/Downloads$` is visible at the bottom.

```
kishan@Ubuntu:~/Downloads$ ls
tarFile.tar
kishan@Ubuntu:~/Downloads$ tar -xvf tarFile.tar
./dwsample1-mp3.mp3
kishan@Ubuntu:~/Downloads$
```

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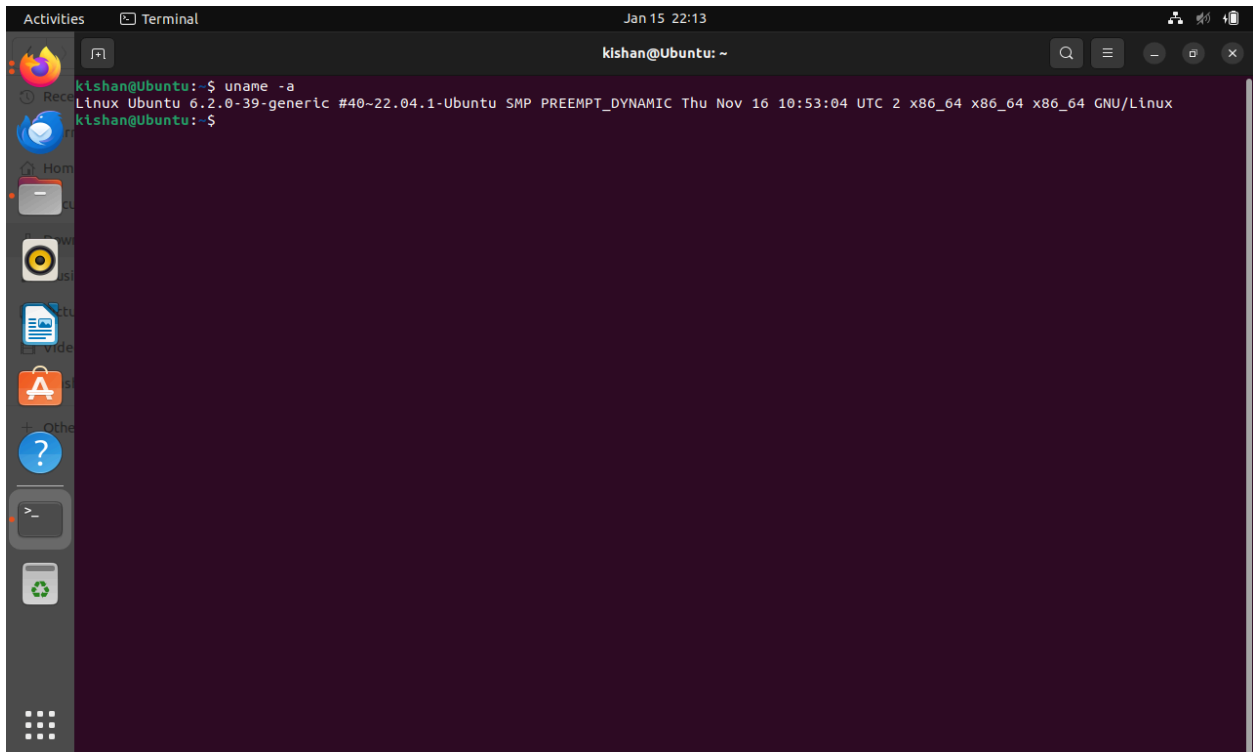
8)



A terminal window titled "kishan@Ubuntu: ~/Downloads" showing the following commands and output:

```
kishan@Ubuntu:~/Downloads$ ls
kishan  zipFile.zip
kishan@Ubuntu:~/Downloads$ unzip zipFile.zip
Archive:  zipFile.zip
  inflating: dwsample1-mp3.mp3
kishan@Ubuntu:~/Downloads$
```

9)

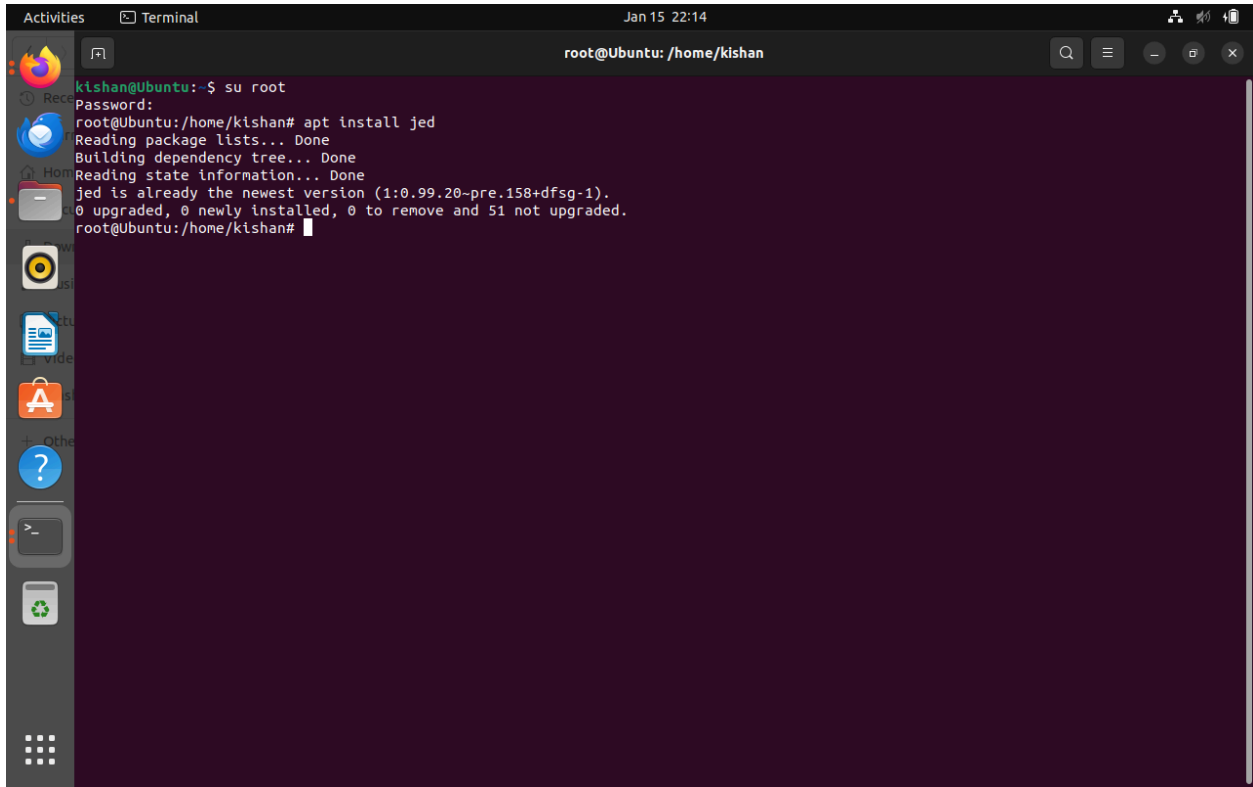


A terminal window titled "kishan@Ubuntu: ~" showing the following command and output:

```
kishan@Ubuntu:~$ uname -a
Linux Ubuntu 6.2.0-39-generic #40~22.04.1-Ubuntu SMP PREEMPT_DYNAMIC Thu Nov 16 10:53:04 UTC 2 x86_64 x86_64 x86_64 GNU/Linux
kishan@Ubuntu:~$
```

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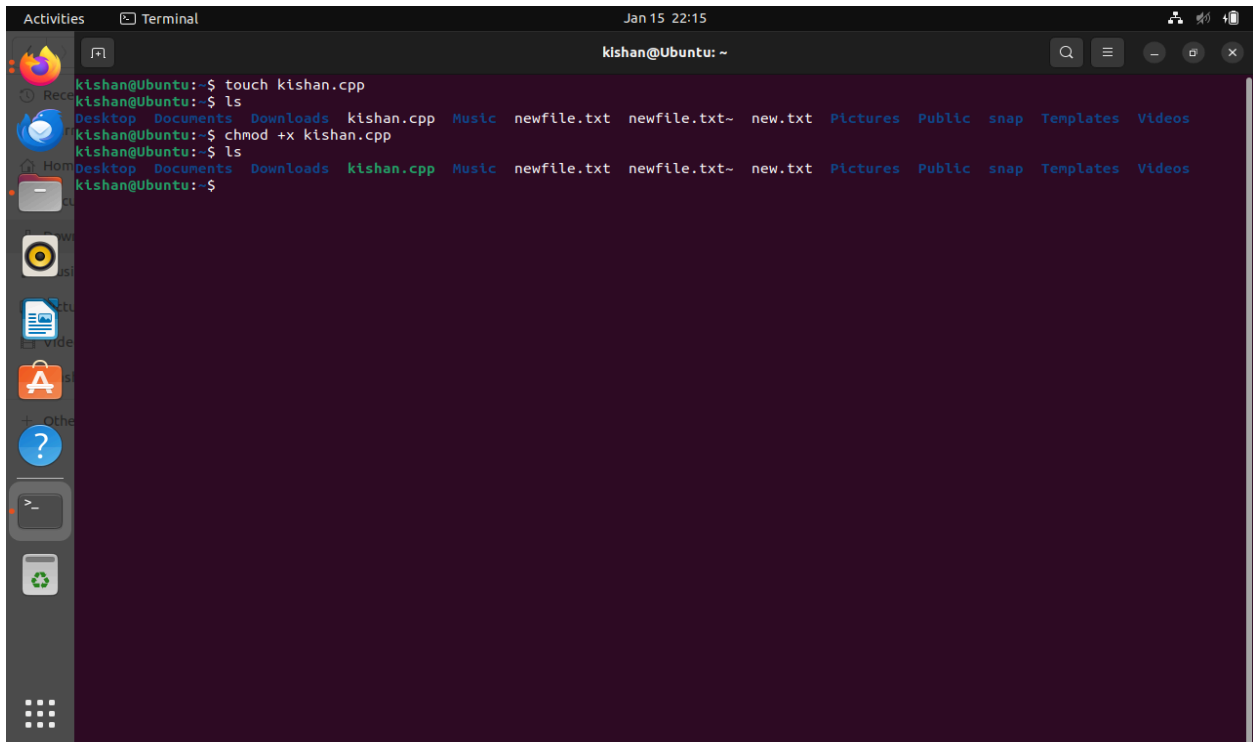
10)



A terminal window titled 'root@Ubuntu: /home/kishan' showing the installation of 'jed' as root. The user 'kishan@Ubuntu' switches to root using 'su root' and provides a password. Then, 'apt install jed' is executed. The terminal output shows that 'jed' is already the newest version (1:0.99.20-pre.158+dfsg-1) and no upgrades are needed.

```
kishan@Ubuntu:~$ su root
Password:
root@Ubuntu:/home/kishan# apt install jed
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
jed is already the newest version (1:0.99.20-pre.158+dfsg-1).
0 upgraded, 0 newly installed, 0 to remove and 51 not upgraded.
root@Ubuntu:/home/kishan#
```

11)

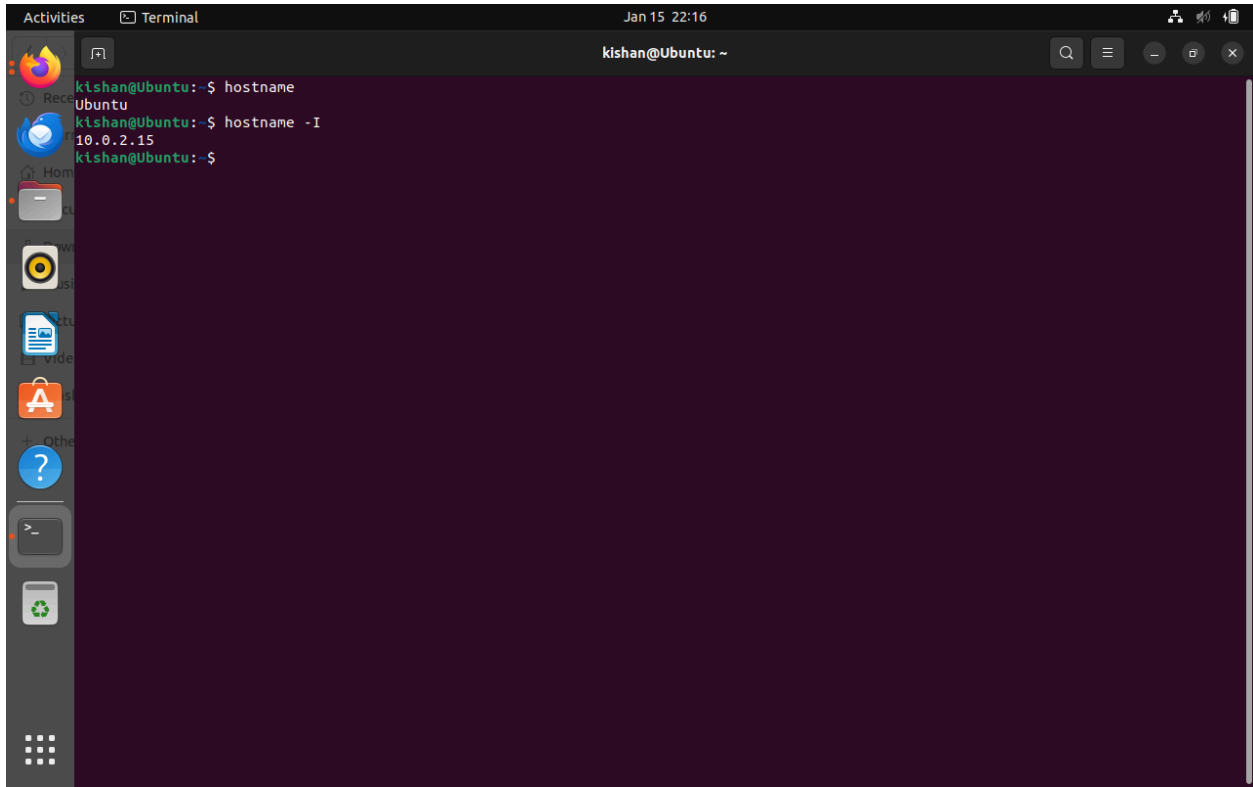


A terminal window titled 'kishan@Ubuntu: ~' showing the creation and permission setting of a file named 'kishan.cpp'. The user runs 'touch kishan.cpp', 'ls' to verify, and 'chmod +x kishan.cpp' to make it executable. A final 'ls' command shows the file with executable permissions.

```
kishan@Ubuntu:~$ touch kishan.cpp
kishan@Ubuntu:~$ ls
Desktop  Documents  Downloads  kishan.cpp  Music  newfile.txt  newfile.txt~  new.txt  Pictures  Public  snap  Templates  Videos
kishan@Ubuntu:~$ chmod +x kishan.cpp
kishan@Ubuntu:~$ ls
Desktop  Documents  Downloads  kishan.cpp  Music  newfile.txt  newfile.txt~  new.txt  Pictures  Public  snap  Templates  Videos
kishan@Ubuntu:~$
```

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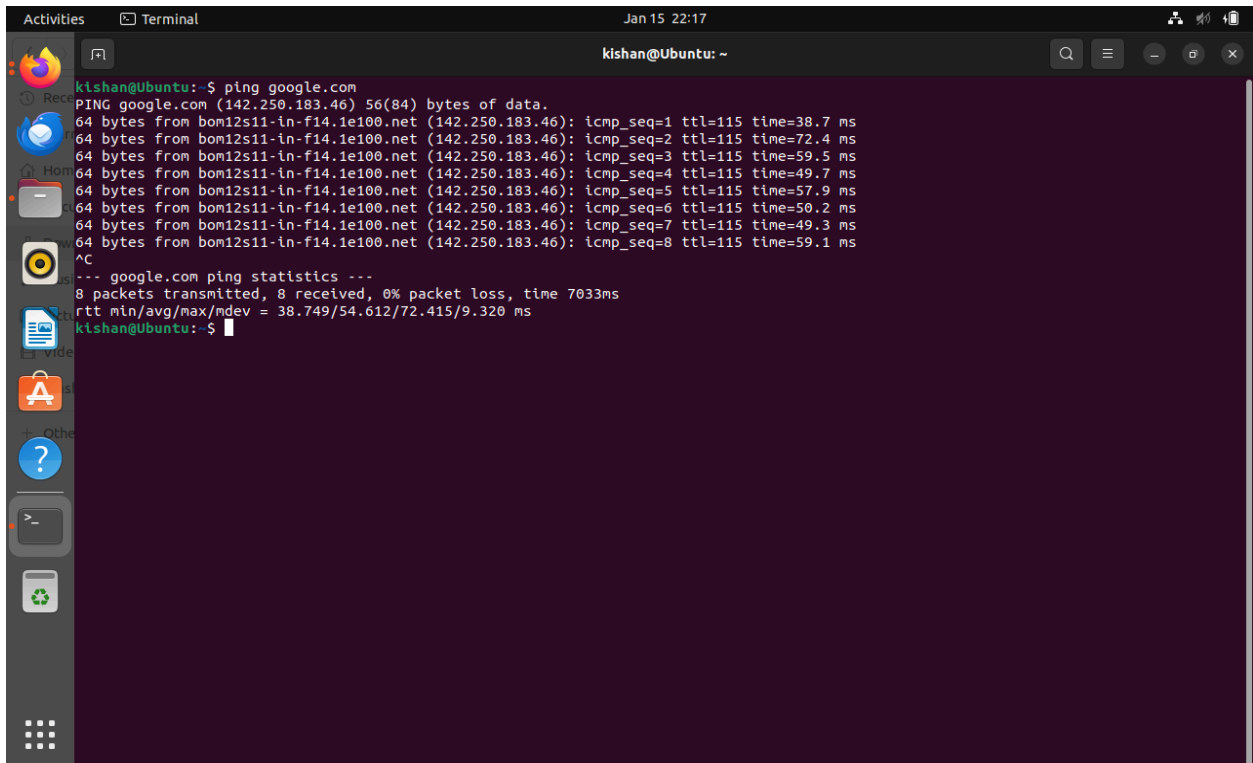
12)



A terminal window titled "kishan@Ubuntu: ~" showing the execution of two commands. The first command is "hostname", which returns "Ubuntu". The second command is "hostname -I", which returns "10.0.2.15". The terminal has a dark purple background and a light-colored text. The window's title bar shows "Activities", "Terminal", and the date "Jan 15 22:16".

```
kishan@Ubuntu:~$ hostname
Ubuntu
kishan@Ubuntu:~$ hostname -I
10.0.2.15
kishan@Ubuntu:~$
```

13)



A terminal window titled "kishan@Ubuntu: ~" showing the execution of the "ping google.com" command. The output displays eight ping results, each showing 64 bytes of data from "bom12s11-in-f14.1e100.net" (142.250.183.46) with varying times and TTL values. Below the ping results, the "google.com ping statistics" are shown, indicating 8 packets transmitted, 8 received, 0% packet loss, and a time of 7033ms. The terminal has a dark purple background and a light-colored text. The window's title bar shows "Activities", "Terminal", and the date "Jan 15 22:17".

```
kishan@Ubuntu:~$ ping google.com
PING google.com (142.250.183.46) 56(84) bytes of data:
64 bytes from bom12s11-in-f14.1e100.net (142.250.183.46): icmp_seq=1 ttl=115 time=38.7 ms
64 bytes from bom12s11-in-f14.1e100.net (142.250.183.46): icmp_seq=2 ttl=115 time=72.4 ms
64 bytes from bom12s11-in-f14.1e100.net (142.250.183.46): icmp_seq=3 ttl=115 time=59.5 ms
64 bytes from bom12s11-in-f14.1e100.net (142.250.183.46): icmp_seq=4 ttl=115 time=49.7 ms
64 bytes from bom12s11-in-f14.1e100.net (142.250.183.46): icmp_seq=5 ttl=115 time=57.9 ms
64 bytes from bom12s11-in-f14.1e100.net (142.250.183.46): icmp_seq=6 ttl=115 time=50.2 ms
64 bytes from bom12s11-in-f14.1e100.net (142.250.183.46): icmp_seq=7 ttl=115 time=49.3 ms
64 bytes from bom12s11-in-f14.1e100.net (142.250.183.46): icmp_seq=8 ttl=115 time=59.1 ms
^C
--- google.com ping statistics ---
8 packets transmitted, 8 received, 0% packet loss, time 7033ms
rtt min/avg/max/mdev = 38.749/54.612/72.415/9.320 ms
kishan@Ubuntu:~$
```