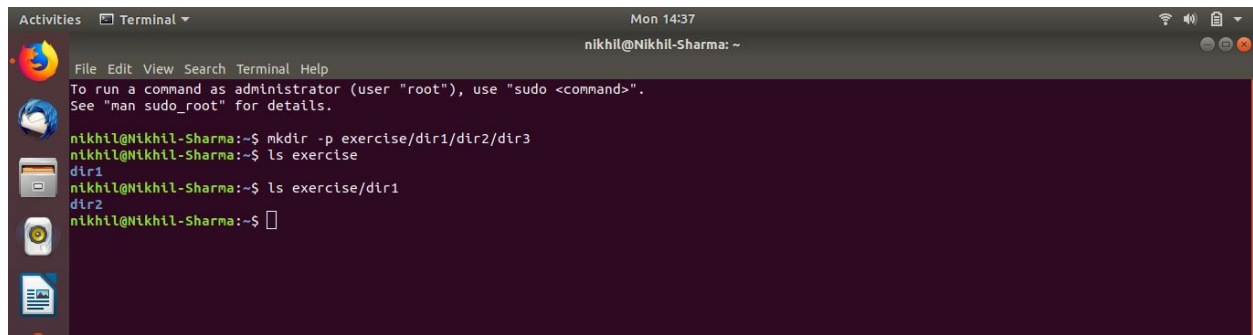
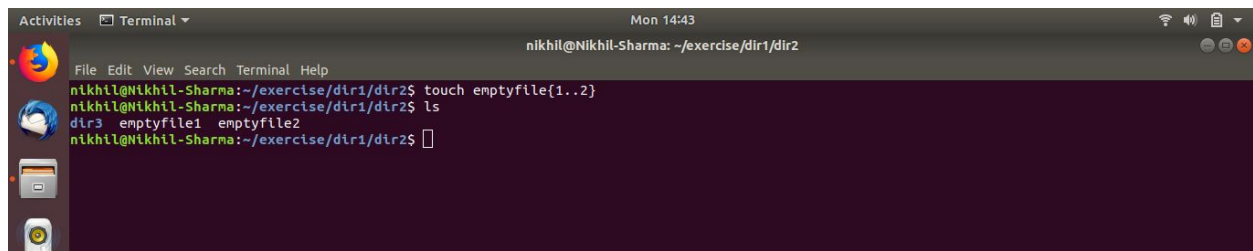


Q1. mkdir -p exercise/dir1/dir2/dir3

A terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar (Mon 14:37, nikhil@Nikhil-Sharma: ~). The terminal shows the following commands and output:

```
nikhil@Nikhil-Sharma:~$ mkdir -p exercise/dir1/dir2/dir3
nikhil@Nikhil-Sharma:~$ ls exercise
dir1
nikhil@Nikhil-Sharma:~$ ls exercise/dir1
dir2
nikhil@Nikhil-Sharma:~$
```

Q2. touch emptyfile{1..2}

A terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar (Mon 14:43, nikhil@Nikhil-Sharma: ~/exercise/dir1/dir2). The terminal shows the following commands and output:

```
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ touch emptyfile{1..2}
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ ls
dir3 emptyfile1 emptyfile2
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$
```

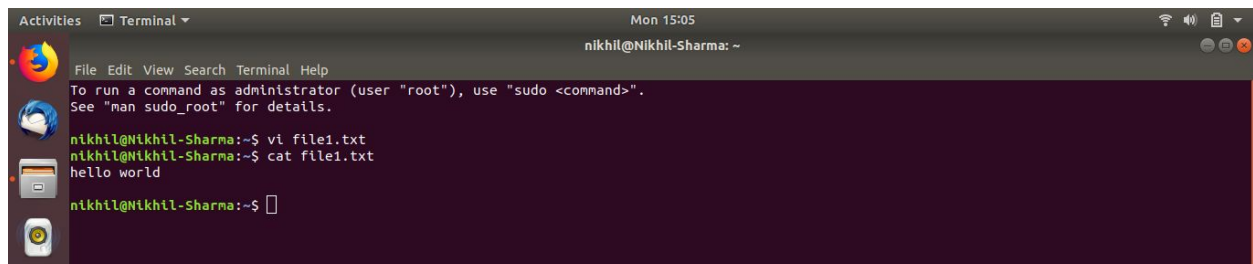
Q3. vi file1.txt

In file1.txt

Firstly enter i for insert mode type "Hello World"

Then esc key then :wq to save

cat file1.txt

A terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar (Mon 15:05, nikhil@Nikhil-Sharma: ~). The terminal shows the following commands and output:

```
nikhil@Nikhil-Sharma:~$ vi file1.txt
nikhil@Nikhil-Sharma:~$ cat file1.txt
hello world
nikhil@Nikhil-Sharma:~$
```

Q4. find /etc -iname passwd

cp /etc/passwd /etc/passwd_copy

mv /etc/passwd_cop /etc/passwd_backup

```
Activities Terminal Mon 15:42
root@Nikhil-Sharma: ~
File Edit View Search Terminal Help
root@Nikhil-Sharma:~# ls /etc
acpi dconf hosts lsb-release polkit-1 ssh
adduser.conf debconf.conf hosts.allow ltrace.conf popularity-contest.conf ssl
alternatives debian_version hosts.deny machine-id ppp subgid
anacrontab default hp ifplugd magic profile subuid
apg.conf deluser.conf ifplugd magic.mime profile.d subuid
apm depmod.d init mailcap protocols sudoers
apparmor dictionaries-common init mailcap.order pulse sudoers.d
apparmor.d dpkg init.d manpath.config python2.7 sysctl.conf
appport drirc inputrc mime.types python3 sysctl.d
appstream.conf apt insserv.conf.d modprobe.d rc0.d systemd
avahi environment iproute2 modules rc1.d terminfo
bash.bashrc firefox issue modules-load.d rc2.d thermal
bash_completion fonts issue.net ntab rc3.d thunderbird
bash_completion.d fstab kernel kernel.img.conf rc4.d timezone
bindresvport.blacklist fuse.conf kernel-loops.conf rc5.d tmpfiles.d
binfmt.d fwupd ldapp ld.so.cache NetworkManager resolvconf udev
bluetooth gai.conf ld.so.conf legal nsswitch.conf rpc updatedb.conf
brlapi.key gdb ld.so.conf.d libao.conf opt rsyslog.conf update-manager
brltty gdm3 glibc libaudit.conf os-release rsyslog.d update-notifier
brltty.conf geoclue ghostscript libblockdev PackageKit sane.d UPower
ca-certificates ca-certificates.conf glibc libblockdev PackageKit sane.d UPower
calendar gnss groff libblockdev PackageKit sane.d UPower
chatscripts group grub.d lintianrc passwd sensors3.conf vtm
console-setup cracklib gshadow gshadow- gss localtime logcheck perl shadow xdg
cron.d gshadow gshadow- gss localtime logcheck perl shadow xdg
cron.daily gshadow gshadow- gss localtime logcheck perl shadow xdg
cron.hourly gshadow gshadow- gss localtime logcheck perl shadow xdg
cron.monthly gshadow gshadow- gss localtime logcheck perl shadow xdg
crontab gshadow gshadow- gss localtime logcheck perl shadow xdg
cron.weekly gshadow gshadow- gss localtime logcheck perl shadow xdg
cups gshadow gshadow- gss localtime logcheck perl shadow xdg
cupsfilters gshadow gshadow- gss localtime logcheck perl shadow xdg
dbus-1 gshadow gshadow- gss localtime logcheck perl shadow xdg
root@Nikhil-Sharma:~#
```

Q5. less /etc/passwd_backup

```
Activities Terminal Mon 16:21
root@Nikhil-Sharma: ~
File Edit View Search Terminal Help
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mail List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,:/run/systemd/netif:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,:/run/systemd/resolve:/usr/sbin/nologin
syslog:x:102:106:/home/syslog:/usr/sbin/nologin
messagebus:x:103:107:/nonexistent:/usr/sbin/nologin
_apt:x:104:65534:/nonexistent:/usr/sbin/nologin
uucidd:x:105:111:/run/uucidd:/usr/sbin/nologin
avahi-autoipd:x:106:112:Avahi autoip daemon,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:107:46:usbmux daemon,,:/var/lib/usbmux:/usr/sbin/nologin
dnsmasq:x:108:65534:dnsmasq,,:/var/lib/misc:/usr/sbin/nologin
rtkit:x:109:114:RealtimeKit,,:/proc:/usr/sbin/nologin
cups-pk-helper:x:110:116:user for cups-pk-helper service,,:/home/cups-pk-helper:/usr/sbin/nologin
speech-dispatcher:x:111:29:Speech Dispatcher,,:/var/run/speech-dispatcher:/bin/false
whoopsie:x:112:117:/nonexistent:/bin/false
kernoops:x:113:65534:Kernel Oops Tracking Daemon,,:/usr/sbin/nologin
saned:x:114:119:/var/lib/saned:/usr/sbin/nologin
pulse:x:115:120:PulseAudio daemon,,:/var/run/pulse:/usr/sbin/nologin
avahi:x:116:122:Avahi mDNS daemon,,:/var/run/avahi-daemon:/usr/sbin/nologin
colord:x:117:123:colord colour management daemon,,:/var/lib/colord:/usr/sbin/nologin
hplip:x:118:7:HPLIP system user,,:/var/run/hplip:/bin/false
geoclue:x:119:124:/var/lib/geoclue:/usr/sbin/nologin
gnome-initial-setup:x:120:65534:/run/gnome-initial-setup:/bin/false
gdm:x:121:125:Gnome Display Manager:/var/lib/gdm3:/bin/false
nikhil:x:1000:1000:Nikhil Sharma,,:/home/nikhil:/bin/bash
root@Nikhil-Sharma:~#
root@Nikhil-Sharma:~#
```

more /etc/passwd_backup

```
Activities Terminal Mon 16:21
root@Nikhil-Sharma: ~

sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailling List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd/netif:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd/resolve:/usr/sbin/nologin
syslog:x:102:106:/home/syslog:/usr/sbin/nologin
messagebus:x:103:107:/nonexistent:/usr/sbin/nologin
_apt:x:104:65534:/nonexistent:/usr/sbin/nologin
uuid:x:105:111:/run/uuid:/usr/sbin/nologin
avahi-autoipd:x:106:112:Avahi autoip daemon,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:107:46:usbmux daemon,,:/var/lib/usbmux:/usr/sbin/nologin
dnsmasq:x:108:65534:dnsmasq,,:/var/lib/misc:/usr/sbin/nologin
rtkit:x:109:114:RealtimeKit,,:/proc:/usr/sbin/nologin
cups-pk-helper:x:110:116:user for cups-pk-helper service,,:/home/cups-pk-helper:/usr/sbin/nologin
speech-dispatcher:x:111:29:Speech Dispatcher,,:/var/run/speech-dispatcher:/bin/false
whoopsie:x:112:117:/nonexistent:/bin/false
kernoops:x:113:65534:Kernel Oops Tracking Daemon,,:/usr/sbin/nologin
saned:x:114:119:/var/lib/saned:/usr/sbin/nologin
pulse:x:115:120:PulseAudio daemon,,:/var/run/pulse:/usr/sbin/nologin
avahi:x:116:122:Avahi mDNS daemon,,:/var/run/avahi-daemon:/usr/sbin/nologin
colord:x:117:123:colord colour management daemon,,:/var/lib/colord:/usr/sbin/nologin
hplip:x:118:7:HPLIP system user,,:/var/run/hplip:/bin/false
geoclue:x:119:124:/var/lib/geoclue:/usr/sbin/nologin
gnome-initial-setup:x:120:65534:/run/gnome-initial-setup:/bin/false
gdm:x:121:125:Gnome Display Manager:/var/lib/gdm3:/bin/false
nikhil:x:1000:1000:Nikhil Sharma,,:/home/nikhil:/bin/bash
root@Nikhil-Sharma:~
```

cat /etc/passwd_backup

```
Activities Terminal Mon 16:21
root@Nikhil-Sharma: ~

sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailling List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd/netif:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd/resolve:/usr/sbin/nologin
syslog:x:102:106:/home/syslog:/usr/sbin/nologin
messagebus:x:103:107:/nonexistent:/usr/sbin/nologin
_apt:x:104:65534:/nonexistent:/usr/sbin/nologin
uuid:x:105:111:/run/uuid:/usr/sbin/nologin
avahi-autoipd:x:106:112:Avahi autoip daemon,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:107:46:usbmux daemon,,:/var/lib/usbmux:/usr/sbin/nologin
dnsmasq:x:108:65534:dnsmasq,,:/var/lib/misc:/usr/sbin/nologin
rtkit:x:109:114:RealtimeKit,,:/proc:/usr/sbin/nologin
cups-pk-helper:x:110:116:user for cups-pk-helper service,,:/home/cups-pk-helper:/usr/sbin/nologin
speech-dispatcher:x:111:29:Speech Dispatcher,,:/var/run/speech-dispatcher:/bin/false
whoopsie:x:112:117:/nonexistent:/bin/false
kernoops:x:113:65534:Kernel Oops Tracking Daemon,,:/usr/sbin/nologin
saned:x:114:119:/var/lib/saned:/usr/sbin/nologin
pulse:x:115:120:PulseAudio daemon,,:/var/run/pulse:/usr/sbin/nologin
avahi:x:116:122:Avahi mDNS daemon,,:/var/run/avahi-daemon:/usr/sbin/nologin
colord:x:117:123:colord colour management daemon,,:/var/lib/colord:/usr/sbin/nologin
hplip:x:118:7:HPLIP system user,,:/var/run/hplip:/bin/false
geoclue:x:119:124:/var/lib/geoclue:/usr/sbin/nologin
gnome-initial-setup:x:120:65534:/run/gnome-initial-setup:/bin/false
gdm:x:121:125:Gnome Display Manager:/var/lib/gdm3:/bin/false
nikhil:x:1000:1000:Nikhil Sharma,,:/home/nikhil:/bin/bash
root@Nikhil-Sharma:~
```

string /etc/passwd_backup


```
Activities  Terminal  Mon 16:30
root@Nikhil-Sharma: ~

File Edit View Search Terminal Help

sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd/netif:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd/resolve:/usr/sbin/nologin
syslog:x:102:106:/:/home/syslog:/usr/sbin/nologin
messagebus:x:103:107:/:/nonexistent:/usr/sbin/nologin
_apt:x:104:65534:/:/nonexistent:/usr/sbin/nologin
uuidd:x:105:111:/:/run/uuidd:/usr/sbin/nologin
avahi-autoipd:x:106:112:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:107:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
dnsmasq:x:108:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
rtkit:x:109:114:RealtimeKit,,,:/proc:/usr/sbin/nologin
cups-pk-helper:x:110:116:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
speech-dispatcher:x:111:29:Speech Dispatcher,,,:/var/run/speech-dispatcher:/bin/false
whoopsie:x:112:117:/:/nonexistent:/bin/false
kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,:/usr/sbin/nologin
saned:x:114:119:/:/var/lib/saned:/usr/sbin/nologin
pulse:x:115:120:PulseAudio daemon,,,:/var/run/pulse:/usr/sbin/nologin
avahi:x:116:122:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/usr/sbin/nologin
colord:x:117:123:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
hplip:x:118:7:HPLIP system user,,,:/var/run/hplip:/bin/false
geoclue:x:119:124:/:/var/lib/geoclue:/usr/sbin/nologin
gnome-initial-setup:x:120:65534:/:/run/gnome-initial-setup:/bin/false
gdm:x:121:125:Gnome Display Manager:/var/lib/gdm3:/bin/false
nikhil:x:1000:1000:Nikhil Sharma,,,:/home/nikhil:/bin/bash
root@Nikhil-Sharma:~
```

Q6.grep "bin/false" /etc/passwd_backup | wc -l

```
root@Nikhil-Sharma:~# grep "/bin/false" /etc/passwd_backup | wc -l
5
root@Nikhil-Sharma:~#
```

Q7.head -n 5 /etc/passwd_backup > output.txt

```
Activities Terminal Mon 16:47 root@Nikhil-Sharma: ~
File Edit View Search Terminal Help
root@Nikhil-Sharma:~# head -n 5 /etc/passwd_backup > output.txt
root@Nikhil-Sharma:~# cat output.txt
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
root@Nikhil-Sharma:~#
```

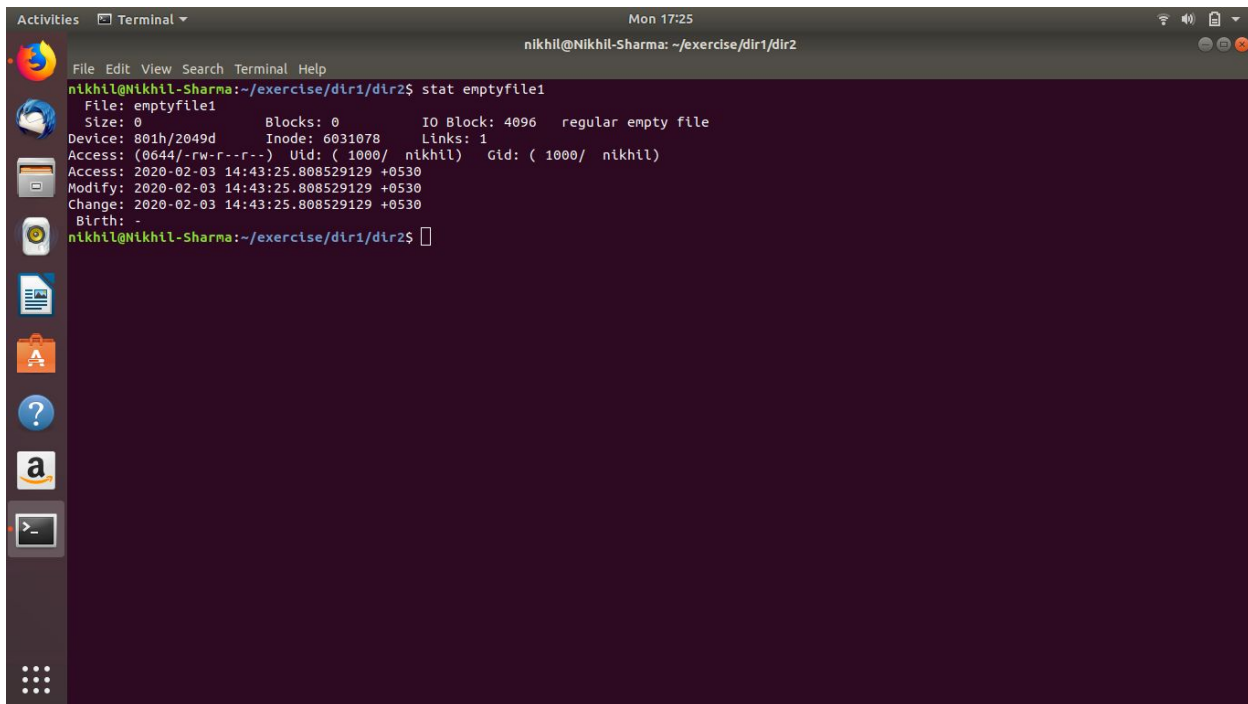
Q8.adduser test

Id test

```
Activities Terminal Mon 16:56 root@Nikhil-Sharma: ~
File Edit View Search Terminal Help
root@Nikhil-Sharma:~# head -n 5 /etc/passwd_backup > output.txt
root@Nikhil-Sharma:~# cat output.txt
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
root@Nikhil-Sharma:~# adduser test
Adding user 'test' ...
Adding new group 'test' (1001) ...
Adding new user 'test' (1001) with group 'test' ...
Creating home directory '/home/test' ...
Copying files from '/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for test
Enter the new value, or press ENTER for the default
Full Name []:
Room Number []:
Work Phone []:
Home Phone []:
Other []:
Is the information correct? [Y/n] y
root@Nikhil-Sharma:~# id test
uid=1001(test) gid=1001(test) groups=1001(test)
root@Nikhil-Sharma:~#
```

Q9.touch -t 201902031712.45 emptyfile1.txt

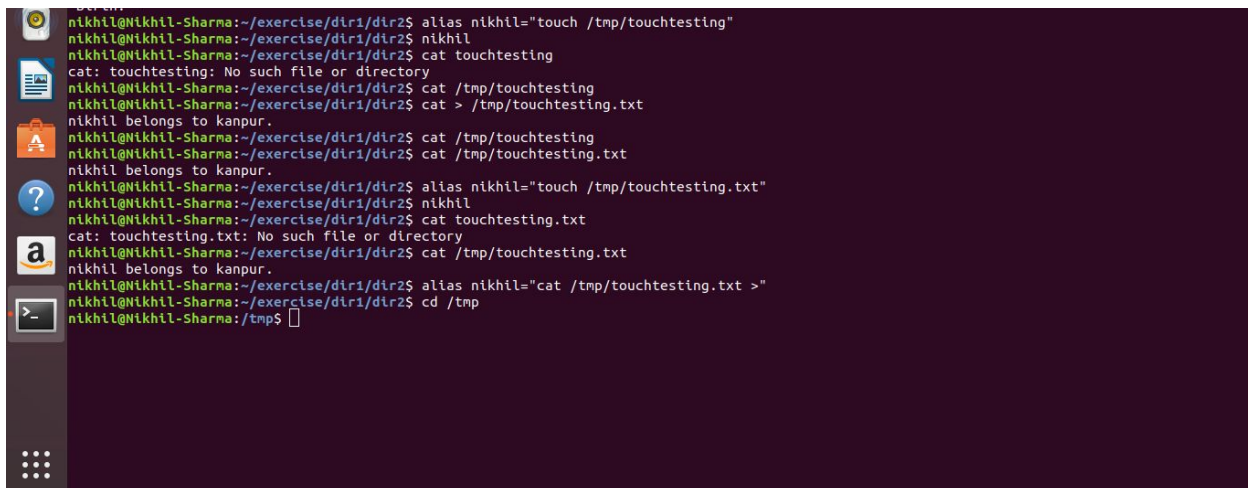
touch -t 201902031714.54 emptyfile2.txt



```
Activities Terminal Mon 17:25
nikhil@Nikhil-Sharma: ~/exercise/dir1/dir2
File Edit View Search Terminal Help
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ stat emptyfile1
File: emptyfile1
Size: 0          Blocks: 0          IO Block: 4096   regular empty file
Device: 801h/2049d Inode: 6031078  Links: 1
Access: (0644/-rw-r--r--)  Uid: ( 1000/  nikhil)   Gid: ( 1000/  nikhil)
Access: 2020-02-03 14:43:25.808529129 +0530
Modify: 2020-02-03 14:43:25.808529129 +0530
Change: 2020-02-03 14:43:25.808529129 +0530
Birth: -
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$
```

Q11. alias nikhil="touch /tmp/aliastesting"

nikhil



```
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ alias nikhil="touch /tmp/touchtesting"
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ nikhil
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ cat touchtesting
cat: touchtesting: No such file or directory
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ cat /tmp/touchtesting
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ cat > /tmp/touchtesting.txt
nikhil belongs to kanpur.
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ cat /tmp/touchtesting
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ cat /tmp/touchtesting.txt
nikhil belongs to kanpur.
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ alias nikhil="touch /tmp/touchtesting.txt"
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ nikhil
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ cat touchtesting.txt
cat: touchtesting.txt: No such file or directory
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ cat /tmp/touchtesting.txt
nikhil belongs to kanpur.
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ alias nikhil="cat /tmp/touchtesting.txt >"
nikhil@Nikhil-Sharma:~/exercise/dir1/dir2$ cd /tmp
nikhil@Nikhil-Sharma:/tmp$
```

Q12.su - test

vi ~/.bashrc

add echo "Welcome \${USER}" at last.

logout

su -test

```
Activities  Terminal  Mon 22:31
test1@Nikhil-Sharma: ~

File Edit View Search Terminal Help

[sudo] password for nikhil:
root@Nikhil-Sharma:~# adduser test1
Adding user `test1' ...
Adding new group `test1' (1002) ...
Adding new user `test1' (1002) with group `test1' ...
Creating home directory `/home/test1' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for test1
Enter the new value, or press ENTER for the default
    Full Name []:
    Room Number []:
    Work Phone []:
    Home Phone []:
    Other []:
Is the information correct? [Y/n] y
root@Nikhil-Sharma:~#
root@Nikhil-Sharma:~# su -test1
su: invalid option -- 't'
Usage: su [options] [LOGIN]

Options:
  -c, --command COMMAND      pass COMMAND to the invoked shell
  -h, --help                 display this help message and exit
  -, -l, --login             make the shell a login shell
  -M, -p,                   do not reset environment variables, and
                             keep the same shell
  --preserve-environment
  -s, --shell SHELL          use SHELL instead of the default in passwd

root@Nikhil-Sharma:~# su - test1
test1@Nikhil-Sharma:~$ vi ~/.bashrc
test1@Nikhil-Sharma:~$ logout
root@Nikhil-Sharma:~# su - test1
Welcome test1
test1@Nikhil-Sharma:~$
```

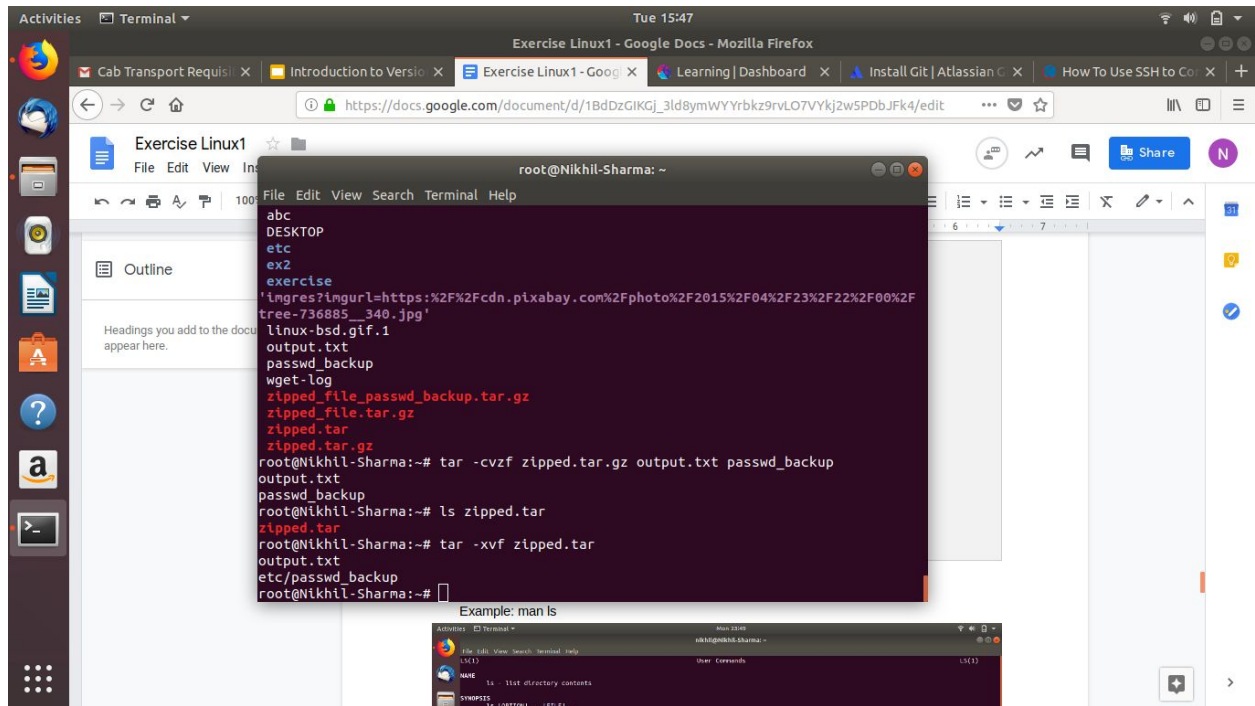
Q13.sudo apt-get install zip

```
Activities  Terminal  Mon 22:37
nikhil@Nikhil-Sharma: ~

File Edit View Search Terminal Help

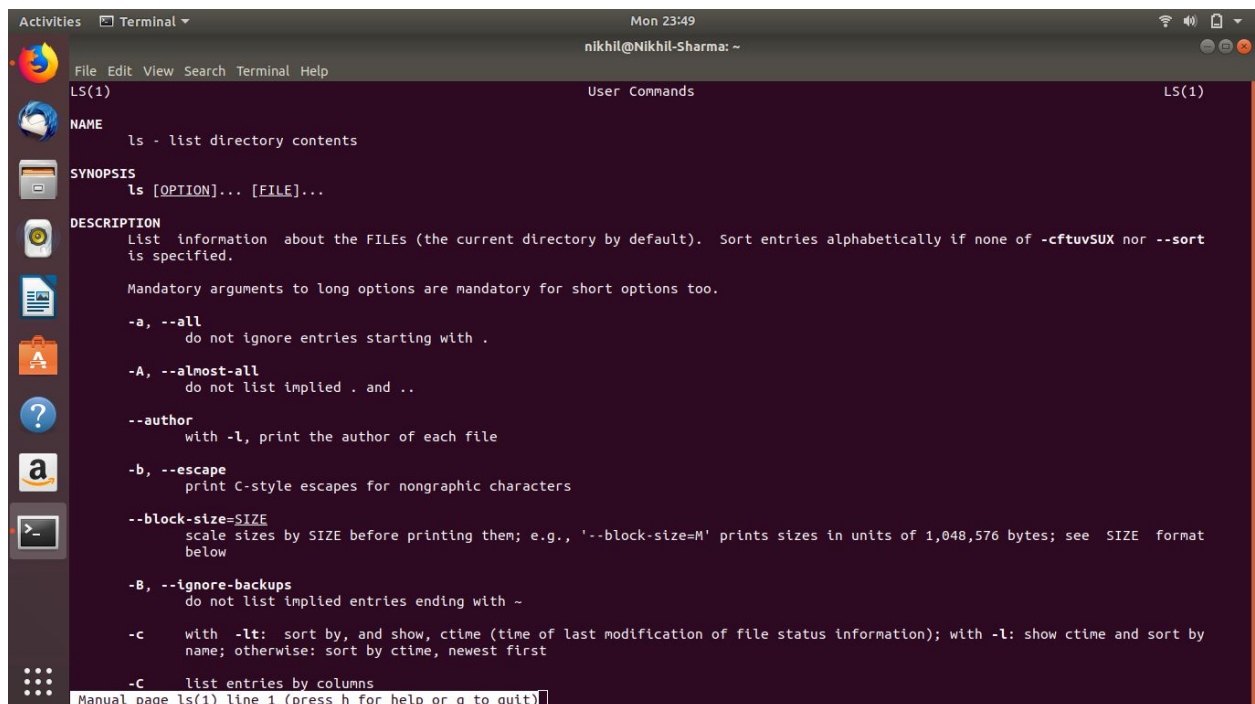
test1@Nikhil-Sharma:~$ sudo apt-get install zip
[sudo] password for test1:
test1 is not in the sudoers file. This incident will be reported.
test1@Nikhil-Sharma:~$ logout
root@Nikhil-Sharma:~# apt-get install zip
Reading package lists... Done
Building dependency tree
Reading state information... Done
zip is already the newest version (3.0-11build1).
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
root@Nikhil-Sharma:~# logout
nikhil@Nikhil-Sharma:~$ sudo apt-get install zip
Reading package lists... Done
Building dependency tree
Reading state information... Done
zip is already the newest version (3.0-11build1).
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
nikhil@Nikhil-Sharma:~$
```

Q14.tar -cvzf zipped.tar.gz output.txt passwd_backup



Q18. By using man command we can find out the basic structure of any command

Example: man ls



Q19. In -s /etc/services /tmp/ports-info


```
Activities Terminal Mon 23:52 root@Nikhil-Sharma: ~
File Edit View Search Terminal Help
nikhil@Nikhil-Sharma:~$ sudo -i
[sudo] password for nikhil:
root@Nikhil-Sharma:~# ln -s /etc/services /tmp/ports-info
root@Nikhil-Sharma:~# ls -l /tmp/ports-info
lrwxrwxrwx 1 root root 13 Feb 3 23:52 /tmp/ports-info -> /etc/services
root@Nikhil-Sharma:~#
```

Q20. whereis xyz .

Q17. wget <https://www.clipart.email/clipart/small-clipart-images-36981.html> | mv
small-clipart-images-36981.html DESKTOP

```
Activities Terminal Tue 00:02 nikhil@Nikhil-Sharma: ~
File Edit View Search Terminal Help
nikhil@Nikhil-Sharma:~$ sudo -i
[sudo] password for nikhil:
root@Nikhil-Sharma:~# ln -s /etc/services /tmp/ports-info
root@Nikhil-Sharma:~# ls -l /tmp/ports-info
lrwxrwxrwx 1 root root 13 Feb 3 23:52 /tmp/ports-info -> /etc/services
root@Nikhil-Sharma:~# logout
nikhil@Nikhil-Sharma:~$ wget https://www.clipart.email/clipart/small-clipart-images-36981.html | mv . DESKTOP
mv: cannot overwrite non-directory 'DESKTOP' with directory '.'
--2020-02-03 23:57:42-- https://www.clipart.email/clipart/small-clipart-images-36981.html
Resolving www.clipart.email (www.clipart.email)... 104.26.4.196, 104.26.5.196, 2606:4700:20::681a:5c4, ...
Connecting to www.clipart.email (www.clipart.email)|104.26.4.196|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: unspecified [text/html]
Saving to: 'small-clipart-images-36981.html'

small-clipart-images-36981.html [ <=> ] 46.03K 209KB/s in 0.2s

2020-02-03 23:57:43 (209 KB/s) - 'small-clipart-images-36981.html' saved [47137]

nikhil@Nikhil-Sharma:~$ wget https://www.clipart.email/clipart/small-clipart-images-36981.html | mv ./small-clipart-images-36981.html DESKTOP
--2020-02-03 23:58:10-- https://www.clipart.email/clipart/small-clipart-images-36981.html
Resolving www.clipart.email (www.clipart.email)... 104.26.5.196, 104.26.4.196, 2606:4700:20::681a:4c4, ...
Connecting to www.clipart.email (www.clipart.email)|104.26.5.196|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: unspecified [text/html]
Saving to: 'small-clipart-images-36981.html'

small-clipart-images-36981.html [ <=> ] 46.03K 194KB/s in 0.2s

2020-02-03 23:58:12 (194 KB/s) - 'small-clipart-images-36981.html' saved [47137]

nikhil@Nikhil-Sharma:~$
```

Q15. scp zipped.tar nikhil@test1

```
Activities Terminal Tue 16:16 root@Nikhil-Sharma: ~
File Edit View Search Terminal Help
hostname pnm2ppa.conf
root@Nikhil-Sharma:~# tar -cvzf zipped.tar.gz output.txt etc/passwd_backup1
output.txt
tar: etc/passwd_backup1: Cannot stat: No such file or directory
tar: Exiting with failure status due to previous errors
root@Nikhil-Sharma:~# tar -czf abc output.txt etc/passwd_backup1
tar: etc/passwd_backup1: Cannot stat: No such file or directory
tar: Exiting with failure status due to previous errors
root@Nikhil-Sharma:~# tar -czf abc output etc/passwd_backup1
tar: output: Cannot stat: No such file or directory
tar: etc/passwd_backup1: Cannot stat: No such file or directory
tar: Exiting with failure status due to previous errors
root@Nikhil-Sharma:~# mv /etc/passwd_backup1 ./passwd_backup
root@Nikhil-Sharma:~# ls
abc
DESKTOP
etc
ex2
exercise
'ingres?ingurl=https:%2F%2Fcdn.pixabay.com%2Fphoto%2F2015%2F04%2F23%2F22%2F00%2Ftree-736885__340.jpg'
linux-bsd.gif.1
output.txt
passwd_backup
wget-log
zipped_file_passwd_backup.tar.gz
zipped_file.tar.gz
zipped.tar
zipped.tar.gz
root@Nikhil-Sharma:~# tar -cvzf zipped.tar.gz output.txt passwd_backup
output.txt
passwd_backup
root@Nikhil-Sharma:~# ls zipped.tar
zipped.tar
root@Nikhil-Sharma:~# tar -xvf zipped.tar
output.txt
etc/passwd_backup
root@Nikhil-Sharma:~# scp zipped.tar nikhil@test1
root@Nikhil-Sharma:~#
```

Q16.ssh mimansha@10.1.209.252

tar -xvzf zipped.tar

```
Activities Terminal Tue 17:44 mimansha@mimansha-singh: ~
File Edit View Search Terminal Help
root@Nikhil-Sharma:~# ssh mimansha@10.1.209.252
mimansha@10.1.209.252's password:
Welcome to Ubuntu 18.04.1 LTS (GNU/Linux 4.15.0-29-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

 * Canonical Livepatch is available for installation.
   - Reduce system reboots and improve kernel security. Activate at:
     https://ubuntu.com/livepatch

633 packages can be updated.
358 updates are security updates.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

mimansha@mimansha-singh:~$ ls
Desktop  examples.desktop  mimansha@test1  passwd_backup  small-clipart-images-36981.html  zipped.tar
Documents  '~exercise'       Music           Pictures       Templates                    zipped.tar.gz
Downloads  mini              output.txt     Public         Videos                      zip.tar

mimansha@mimansha-singh:~$ tar -xvz zipped.tar
tar: Refusing to read archive contents from terminal (missing -f option?)
tar: Error is not recoverable: exiting now
mimansha@mimansha-singh:~$ tar -f -xvz zipped.tar.gz
tar: You must specify one of the '-Acdrux', '--delete' or '--test-label' options
Try 'tar --help' or 'tar --usage' for more information.
mimansha@mimansha-singh:~$ tar -xvzf zipped.tar.gz
output.txt
passwd_backup
mimansha@mimansha-singh:~$
```

Q10.

```
Activities Terminal Wed 22:02
nikhil@Nikhil-Sharma: ~

File Edit View Search Terminal Tabs Help

nikhil@Nikhil-Sharma: ~
nikhil@Nikhil-Sharma: ~/nikhil_tmp
nikhil@Nikhil-Sharma: ~

Password:
Welcome test1
test1@Nikhil-Sharma:~$ gedit output
No protocol specified
Unable to init server: Could not connect: Connection refused

(gedit:8076): Gtk-WARNING **: 21:57:58.596: cannot open display: :0
test1@Nikhil-Sharma:~$ ls
examples.desktop  output
test1@Nikhil-Sharma:~$ logout
nikhil@Nikhil-Sharma:~$ touch test
nikhil@Nikhil-Sharma:~$ sudo chown test1 test
nikhil@Nikhil-Sharma:~$ ls -l
total 176
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:32 Desktop
-rw-r--r-- 1 nikhil nikhil 47137 Feb 3 23:57 DESKTOP
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Documents
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Downloads
drwxrwxr-x 2 nikhil nikhil 4096 Feb 4 17:45 etc
drwxr-xr-x 2 nikhil nikhil 4096 Feb 5 15:22 ex2
-rw-r--r-- 1 nikhil nikhil 8980 Jan 29 14:28 examples.desktop
drwxr-xr-x 3 nikhil nikhil 4096 Feb 3 14:33 exercise
-rw-r--r-- 1 nikhil nikhil 13 Feb 3 15:05 file1.txt
-rw-r--r-- 1 nikhil nikhil 0 Feb 3 12:09 firstsession
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Music
drwxr-xr-x 4 nikhil nikhil 4096 Feb 5 17:29 nikhil_tmp
-rwxrwxrwx 1 nikhil nikhil 0 Feb 5 21:56 output
drwxr-xr-x 2 nikhil nikhil 4096 Feb 5 17:23 Pictures
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Public
-rw-r--r-- 1 nikhil nikhil 47137 Feb 3 23:58 small-clipart-images-36981.html
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Templates
-rw-r--r-- 1 test1 nikhil 0 Feb 5 22:01 test
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Videos
-rw-r--r-- 1 nikhil nikhil 994 Feb 3 22:44 zipped_file.tar.gz
-rw-r--r-- 1 nikhil nikhil 45 Feb 4 15:17 zipped.tar
nikhil@Nikhil-Sharma:~$
```

```
Activities Terminal Wed 22:03
nikhil@Nikhil-Sharma: ~

File Edit View Search Terminal Tabs Help

nikhil@Nikhil-Sharma: ~
nikhil@Nikhil-Sharma: ~/nikhil_tmp
nikhil@Nikhil-Sharma: ~

-rwxrwxrwx 1 nikhil nikhil 0 Feb 5 21:56 output
drwxr-xr-x 2 nikhil nikhil 4096 Feb 5 17:23 Pictures
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Public
-rw-r--r-- 1 nikhil nikhil 47137 Feb 3 23:58 small-clipart-images-36981.html
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Templates
-rw-r--r-- 1 test1 nikhil 0 Feb 5 22:01 test
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Videos
-rw-r--r-- 1 nikhil nikhil 994 Feb 3 22:44 zipped_file.tar.gz
-rw-r--r-- 1 nikhil nikhil 45 Feb 4 15:17 zipped.tar
nikhil@Nikhil-Sharma:~$ chmod 777 test
chmod: changing permissions of 'test': Operation not permitted
nikhil@Nikhil-Sharma:~$ sudo chmod 777 test
nikhil@Nikhil-Sharma:~$ ls -l
total 176
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:32 Desktop
-rw-r--r-- 1 nikhil nikhil 47137 Feb 3 23:57 DESKTOP
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Documents
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Downloads
drwxrwxr-x 2 nikhil nikhil 4096 Feb 4 17:45 etc
drwxr-xr-x 2 nikhil nikhil 4096 Feb 5 15:22 ex2
-rw-r--r-- 1 nikhil nikhil 8980 Jan 29 14:28 examples.desktop
drwxr-xr-x 3 nikhil nikhil 4096 Feb 3 14:33 exercise
-rw-r--r-- 1 nikhil nikhil 13 Feb 3 15:05 file1.txt
-rw-r--r-- 1 nikhil nikhil 0 Feb 3 12:09 firstsession
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Music
drwxr-xr-x 4 nikhil nikhil 4096 Feb 5 17:29 nikhil_tmp
-rwxrwxrwx 1 nikhil nikhil 0 Feb 5 21:56 output
drwxr-xr-x 2 nikhil nikhil 4096 Feb 5 22:02 Pictures
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Public
-rw-r--r-- 1 nikhil nikhil 47137 Feb 3 23:58 small-clipart-images-36981.html
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Templates
-rwxrwxrwx 1 test1 nikhil 0 Feb 5 22:01 test
drwxr-xr-x 2 nikhil nikhil 4096 Jan 29 14:31 Videos
-rw-r--r-- 1 nikhil nikhil 994 Feb 3 22:44 zipped_file.tar.gz
-rw-r--r-- 1 nikhil nikhil 45 Feb 4 15:17 zipped.tar
nikhil@Nikhil-Sharma:~$
```