

LINUX Exercise (By: Siddharth Gupta)

Ans 1:

```
Activities Terminal Mon 3:55 PM
ttn@ttn: ~/exercise

File Edit View Search Terminal Help

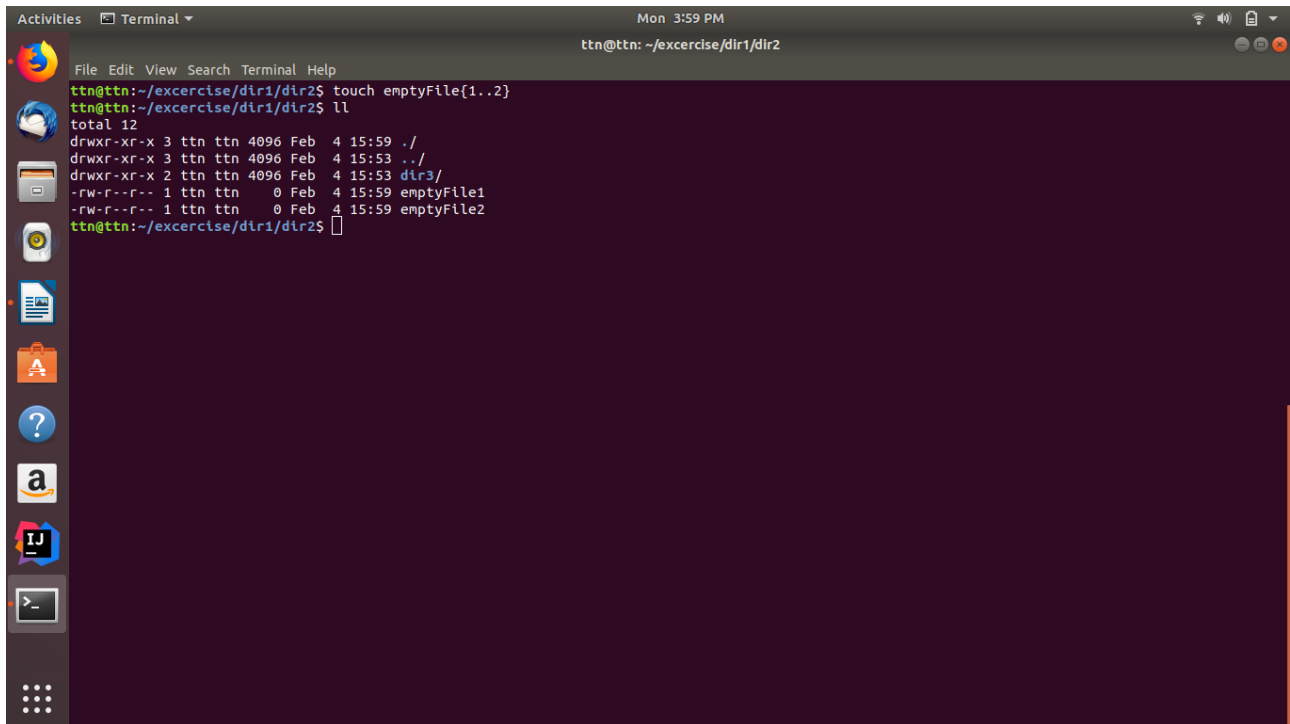
ttn@ttn:~$ mkdir exercise
ttn@ttn:~$ ll
total 112
drwxr-xr-x 20 ttn ttn 4096 Feb  4 15:53 ./
drwxr-xr-x  4 root root 4096 Jan 30 23:40 ../
drwxr-xr-x  2 ttn ttn 4096 Feb  2 12:46 .android/
-rw-r--r--  1 ttn ttn  10 Feb  2 12:46 .bash_history
-rw-r--r--  1 ttn ttn 220 Jan 30 23:40 .bash_logout
-rw-r--r--  1 ttn ttn 3771 Jan 30 23:40 .bashrc
drwx----- 15 ttn ttn 4096 Feb  2 13:30 .cache/
drwx----- 15 ttn ttn 4096 Feb  2 13:30 .config/
drwxr-xr-x  3 ttn ttn 4096 Feb  2 12:43 Desktop/
drwxr-xr-x  2 ttn ttn 4096 Jan 31 05:18 Documents/
drwxr-xr-x  2 ttn ttn 4096 Feb  2 13:31 Downloads/
-rw-r--r--  1 ttn ttn 8980 Jan 30 23:40 examples.desktop
drwxr-xr-x  2 ttn ttn 4096 Feb  4 15:53 exercise/
drwx-----  3 ttn ttn 4096 Feb  2 12:46 .gnome/
drwx-----  3 ttn ttn 4096 Jan 31 05:18 .gnupg/
-rw-r--r--  1 ttn ttn 1224 Feb  4 15:50 .ICEauthority
drwxr-xr-x  4 ttn ttn 4096 Feb  2 12:45 .IntelliJ IDEA2018.3/
drwxr-xr-x  4 ttn ttn 4096 Feb  2 12:45 .java/
drwx-----  3 ttn ttn 4096 Jan 31 05:18 .local/
drwx-----  5 ttn ttn 4096 Feb  2 21:24 .mozilla/
drwxr-xr-x  2 ttn ttn 4096 Jan 31 05:18 Music/
drwxr-xr-x  2 ttn ttn 4096 Jan 31 05:18 Pictures/
-rw-r--r--  1 ttn ttn  807 Jan 30 23:40 .profile
drwxr-xr-x  2 ttn ttn 4096 Jan 31 05:18 Public/
drwxr-xr-x  2 ttn ttn 4096 Jan 31 05:18 Templates/
drwxr-xr-x  2 ttn ttn 4096 Jan 31 05:18 Videos/
ttn@ttn:~$ cd exercise/
ttn@ttn:~/exercise$ mkdir -p dir1/dir2/dir3
ttn@ttn:~/exercise$ ll
total 12
drwxr-xr-x  3 ttn ttn 4096 Feb  4 15:53 ./
drwxr-xr-x 20 ttn ttn 4096 Feb  4 15:53 ../
drwxr-xr-x  3 ttn ttn 4096 Feb  4 15:53 dir1/
ttn@ttn:~/exercise$
```

```
Activities Terminal Mon 3:56 PM
ttn@ttn: ~/exercise/dir1/dir2/dir3

File Edit View Search Terminal Help

ttn@ttn:~/exercise$ cd dir1/
ttn@ttn:~/exercise/dir1$ ll
total 12
drwxr-xr-x  3 ttn ttn 4096 Feb  4 15:53 ./
drwxr-xr-x  3 ttn ttn 4096 Feb  4 15:53 ../
drwxr-xr-x  3 ttn ttn 4096 Feb  4 15:53 dir2/
ttn@ttn:~/exercise/dir1$ cd dir2/
ttn@ttn:~/exercise/dir1/dir2$ ll
total 12
drwxr-xr-x  3 ttn ttn 4096 Feb  4 15:53 ./
drwxr-xr-x  3 ttn ttn 4096 Feb  4 15:53 ../
drwxr-xr-x  2 ttn ttn 4096 Feb  4 15:53 dir3/
ttn@ttn:~/exercise/dir1/dir2$ cd dir3/
ttn@ttn:~/exercise/dir1/dir2/dir3$ ll
total 8
drwxr-xr-x  2 ttn ttn 4096 Feb  4 15:53 ./
drwxr-xr-x  3 ttn ttn 4096 Feb  4 15:53 ../
ttn@ttn:~/exercise/dir1/dir2/dir3$
```

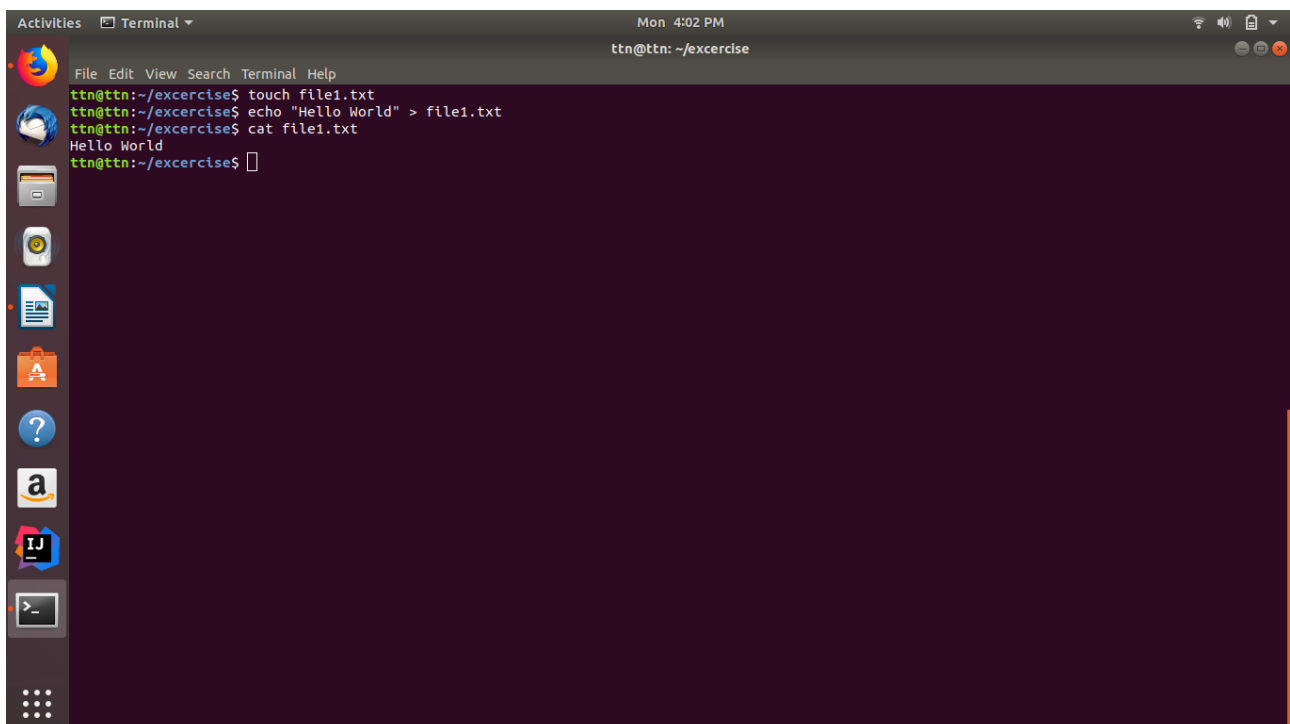
Ans 2



A terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar (Mon 3:59 PM, ttn@ttn: ~/exercise/dir1/dir2). The terminal shows the following commands and output:

```
ttn@ttn:~/exercise/dir1/dir2$ touch emptyFile{1..2}
ttn@ttn:~/exercise/dir1/dir2$ ll
total 12
drwxr-xr-x 3 ttn ttn 4096 Feb  4 15:59 ./
drwxr-xr-x 3 ttn ttn 4096 Feb  4 15:53 ../
drwxr-xr-x 2 ttn ttn 4096 Feb  4 15:53 dir3/
-rw-r--r-- 1 ttn ttn  0 Feb  4 15:59 emptyFile1
-rw-r--r-- 1 ttn ttn  0 Feb  4 15:59 emptyFile2
ttn@ttn:~/exercise/dir1/dir2$
```

Ans 3



A terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar (Mon 4:02 PM, ttn@ttn: ~/exercise). The terminal shows the following commands and output:

```
ttn@ttn:~/exercise$ touch file1.txt
ttn@ttn:~/exercise$ echo "Hello World" > file1.txt
ttn@ttn:~/exercise$ cat file1.txt
Hello World
ttn@ttn:~/exercise$
```

Ans 4

```
Activities Terminal Mon 4:08 PM ttn@ttn: ~/exercise

ttn@ttn:/$ cd etc/
ttn@ttn:/etc$ find passwd
passwd
ttn@ttn:/etc$ cp passwd ~/
ttn@ttn:/etc$ cp passwd ~/exercise/passwd_copy
ttn@ttn:/etc$ cd ~/exercise/
ttn@ttn:~/exercise$ ll
total 20
drwxr-xr-x 3 ttn ttn 4096 Feb 4 16:07 ./
drwxr-xr-x 20 ttn ttn 4096 Feb 4 15:53 ../
drwxr-xr-x 3 ttn ttn 4096 Feb 4 15:53 dir1/
-rw-r--r-- 1 ttn ttn 12 Feb 4 16:02 file1.txt
-rw-r--r-- 1 ttn ttn 2402 Feb 4 16:07 passwd_copy
ttn@ttn:~/exercise$ mv passwd_copy ~/exercise/passwd_backup
ttn@ttn:~/exercise$ ll
total 20
drwxr-xr-x 3 ttn ttn 4096 Feb 4 16:08 ./
drwxr-xr-x 20 ttn ttn 4096 Feb 4 15:53 ../
drwxr-xr-x 3 ttn ttn 4096 Feb 4 15:53 dir1/
-rw-r--r-- 1 ttn ttn 12 Feb 4 16:02 file1.txt
-rw-r--r-- 1 ttn ttn 2402 Feb 4 16:07 passwd_backup
ttn@ttn:~/exercise$
```

Ans 5

```
Activities Terminal Mon 4:12 PM ttn@ttn: ~/exercise

ttn@ttn:~/exercise$ less passwd_backup
ttn@ttn:~/exercise$ more passwd_backup
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
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:Mail 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
```

```
Activities Terminal Mon 4:12 PM ttn@ttn: ~/exercise

File Edit View Search Terminal Help

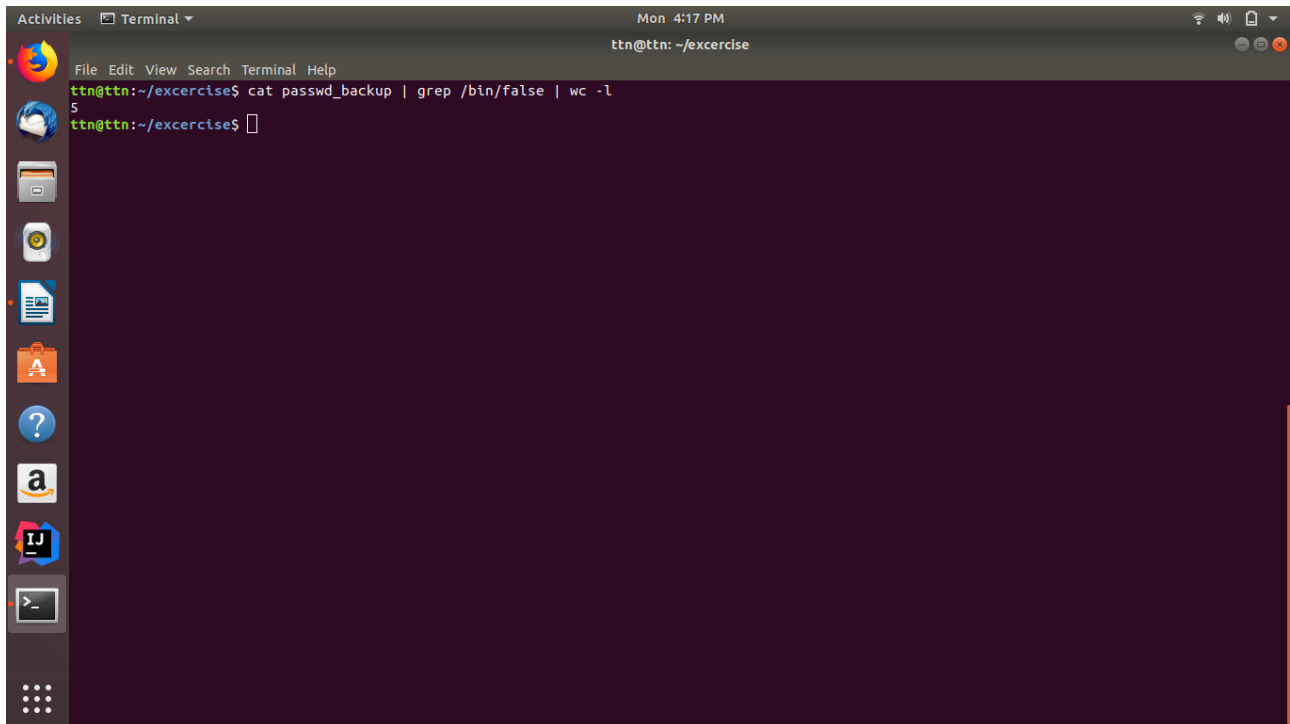
ttn@ttn:~/exercise$ cat passwd_backup
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
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
uidd:x:105:111:/run/uidd:/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
whoopste: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
```

```
Activities Terminal Mon 4:13 PM ttn@ttn: ~/exercise

File Edit View Search Terminal Help

ttn@ttn:~/exercise$ strings passwd_backup
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
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
uidd:x:105:111:/run/uidd:/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
whoopste: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
```

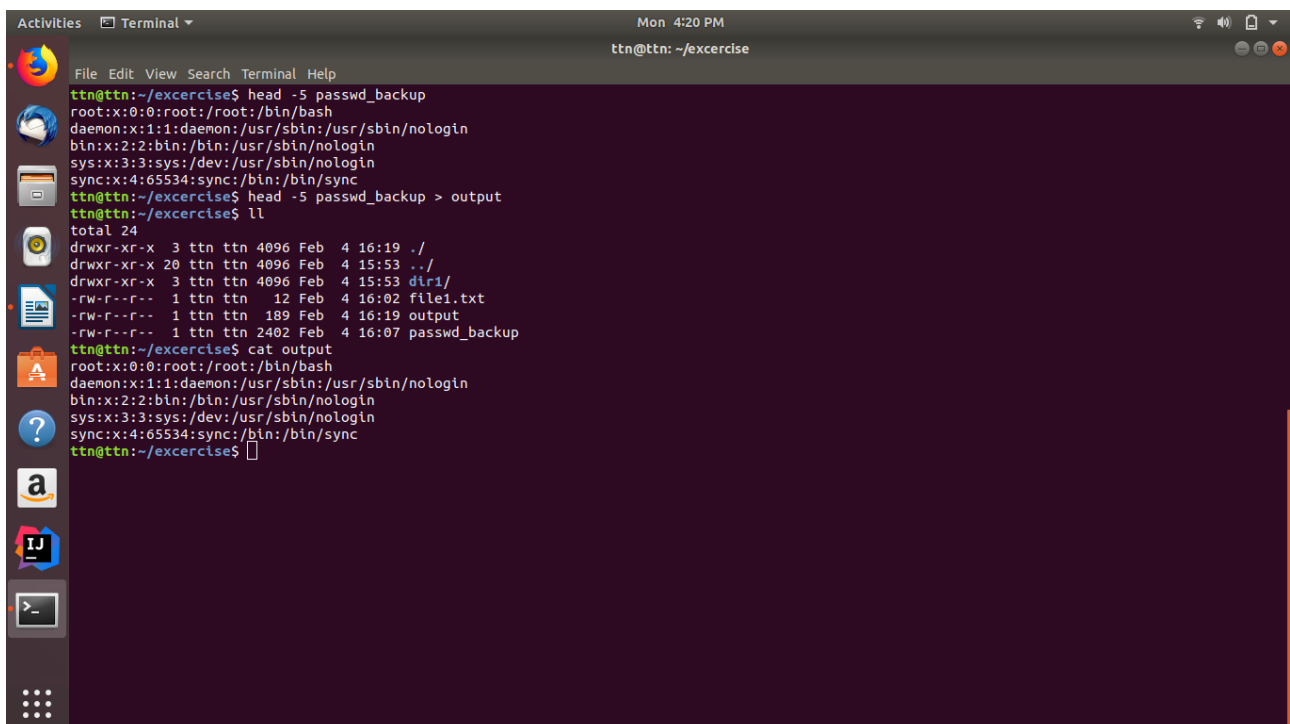
Ans 6



A terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar (Mon 4:17 PM, ttn@ttn: ~/exercise). The prompt is 'ttn@ttn:~/exercise\$'. The command 'cat passwd_backup | grep /bin/false | wc -l' is entered and executed, resulting in the output '5'.

```
ttn@ttn:~/exercise$ cat passwd_backup | grep /bin/false | wc -l
5
ttn@ttn:~/exercise$
```

Ans 7



A terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar (Mon 4:20 PM, ttn@ttn: ~/exercise). The prompt is 'ttn@ttn:~/exercise\$'. The command 'head -5 passwd_backup' is entered and executed, resulting in the output of the first five lines of the passwd file. The prompt is then 'ttn@ttn:~/exercise\$'. The command 'head -5 passwd_backup > output' is entered and executed. The prompt is then 'ttn@ttn:~/exercise\$'. The command 'll' is entered and executed, resulting in the output of the 'ls -l' command. The prompt is then 'ttn@ttn:~/exercise\$'. The command 'cat output' is entered and executed, resulting in the output of the contents of the 'output' file.

```
ttn@ttn:~/exercise$ head -5 passwd_backup
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
ttn@ttn:~/exercise$ head -5 passwd_backup > output
ttn@ttn:~/exercise$ ll
total 24
drwxr-xr-x  3 ttn ttn 4096 Feb  4 16:19 ./
drwxr-xr-x 20 ttn ttn 4096 Feb  4 15:53 ../
drwxr-xr-x  3 ttn ttn 4096 Feb  4 15:53 dir1/
-rw-r--r--  1 ttn ttn   12 Feb  4 16:02 file1.txt
-rw-r--r--  1 ttn ttn  189 Feb  4 16:19 output
-rw-r--r--  1 ttn ttn 2402 Feb  4 16:07 passwd_backup
ttn@ttn:~/exercise$ cat output
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
ttn@ttn:~/exercise$
```

Ans 8

```
Activities Terminal Mon 4:27 PM root@ttn: /home/ttn/exercise
File Edit View Search Terminal Help
ttn@ttn:~/exercise$ sudo su
[sudo] password for ttn:
Sorry, try again.
[sudo] password for ttn:
root@ttn:/home/ttn/exercise# 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@ttn:/home/ttn/exercise# id test
uid=1001(test) gid=1001(test) groups=1001(test)
root@ttn:/home/ttn/exercise#
```

Ans 9

```
Activities Terminal Mon 4:31 PM ttn@ttn: ~/exercise/dir1/dir2
File Edit View Search Terminal Help
ttn@ttn:~/exercise/dir1/dir2$ ll
total 12
drwxr-xr-x 3 ttn ttn 4096 Feb 4 15:59 ./
drwxr-xr-x 3 ttn ttn 4096 Feb 4 15:53 ../
drwxr-xr-x 2 ttn ttn 4096 Feb 4 15:53 dir3/
-rw-r--r-- 1 ttn ttn 0 Feb 4 15:59 emptyFile1
-rw-r--r-- 1 ttn ttn 0 Feb 4 15:59 emptyFile2
ttn@ttn:~/exercise/dir1/dir2$ touch emptyFile1
ttn@ttn:~/exercise/dir1/dir2$ touch emptyFile2
ttn@ttn:~/exercise/dir1/dir2$ ll
total 12
drwxr-xr-x 3 ttn ttn 4096 Feb 4 15:59 ./
drwxr-xr-x 3 ttn ttn 4096 Feb 4 15:53 ../
drwxr-xr-x 2 ttn ttn 4096 Feb 4 15:53 dir3/
-rw-r--r-- 1 ttn ttn 0 Feb 4 16:31 emptyFile1
-rw-r--r-- 1 ttn ttn 0 Feb 4 16:31 emptyFile2
ttn@ttn:~/exercise/dir1/dir2$
```

Ans 10

```
Activities Terminal Mon 4:48 PM ttn@ttn: ~/exercice
File Edit View Search Terminal Help
-rw-r--r-- 1 ttn ttn 2402 Feb 4 16:07 passwd_backup
ttn@ttn:~/exercice$ chmod 777 output
ttn@ttn:~/exercice$ ll
total 24
drwxr-xr-x 3 ttn ttn 4096 Feb 4 16:19 ./
drwxr-xr-x 20 ttn ttn 4096 Feb 4 16:24 ../
drwxr-xr-x 3 ttn ttn 4096 Feb 4 15:53 dir1/
-rw-r--r-- 1 ttn ttn 12 Feb 4 16:02 file1.txt
-rwxrwxrwx 1 ttn ttn 189 Feb 4 16:19 output*
-rw-r--r-- 1 ttn ttn 2402 Feb 4 16:07 passwd_backup
ttn@ttn:~/exercice$ su test
Password:
test@ttn:/home/ttn/exercice$ clear

test@ttn:/home/ttn/exercice$ su test
Password:
test@ttn:/home/ttn/exercice$ ll
total 24
drwxr-xr-x 3 ttn ttn 4096 Feb 4 16:19 ./
drwxr-xr-x 20 ttn ttn 4096 Feb 4 16:24 ../
drwxr-xr-x 3 ttn ttn 4096 Feb 4 15:53 dir1/
-rw-r--r-- 1 ttn ttn 12 Feb 4 16:02 file1.txt
-rwxrwxrwx 1 ttn ttn 189 Feb 4 16:19 output*
-rw-r--r-- 1 ttn ttn 2402 Feb 4 16:07 passwd_backup
test@ttn:/home/ttn/exercice$ cat output
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
test@ttn:/home/ttn/exercice$ echo "The File is edited buy test user" > output
test@ttn:/home/ttn/exercice$ cat output
The File is edited buy test user
```

```
Activities Terminal Mon 5:08 PM test@ttn: /home/ttn/exercice
File Edit View Search Terminal Help
test@ttn:/home/ttn/exercice$ su ttn
Password:
ttn@ttn:~/exercice$ sudo usermod -gid 1000 ttn
usermod: group 'id' does not exist
ttn@ttn:~/exercice$ isudo usermod -gid 1000 ttn
Command 'isudo' not found, did you mean:
  command 'sudo' from deb sudo
  command 'sudo' from deb sudo-ldap
Try: sudo apt install <deb name>
ttn@ttn:~/exercice$ isudo usermod -gid 1001 ttn
Command 'isudo' not found, did you mean:
  command 'sudo' from deb sudo
  command 'sudo' from deb sudo-ldap
Try: sudo apt install <deb name>
ttn@ttn:~/exercice$ sudo usermod -gid 1001 ttn
usermod: group 'id' does not exist
ttn@ttn:~/exercice$ id
uid=1000(ttn) gid=1001(test) groups=1001(test),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),116(lpadmin),126(sambashare)
ttn@ttn:~/exercice$ ll
total 24
drwxr-xr-x 3 ttn test 4096 Feb 4 16:19 ./
drwxr-xr-x 20 ttn test 4096 Feb 4 16:24 ../
drwxr-xr-x 3 ttn test 4096 Feb 4 15:53 dir1/
-rw-r--r-- 1 ttn test 12 Feb 4 16:02 file1.txt
-rwxrwxr-x 1 ttn test 33 Feb 4 16:39 output*
-rw-r--r-- 1 ttn test 2402 Feb 4 16:07 passwd_backup
ttn@ttn:~/exercice$ su test
Password:
test@ttn:/home/ttn/exercice$ echo "File edited after changing permissions form the test user" > output
test@ttn:/home/ttn/exercice$
```


Ans 11

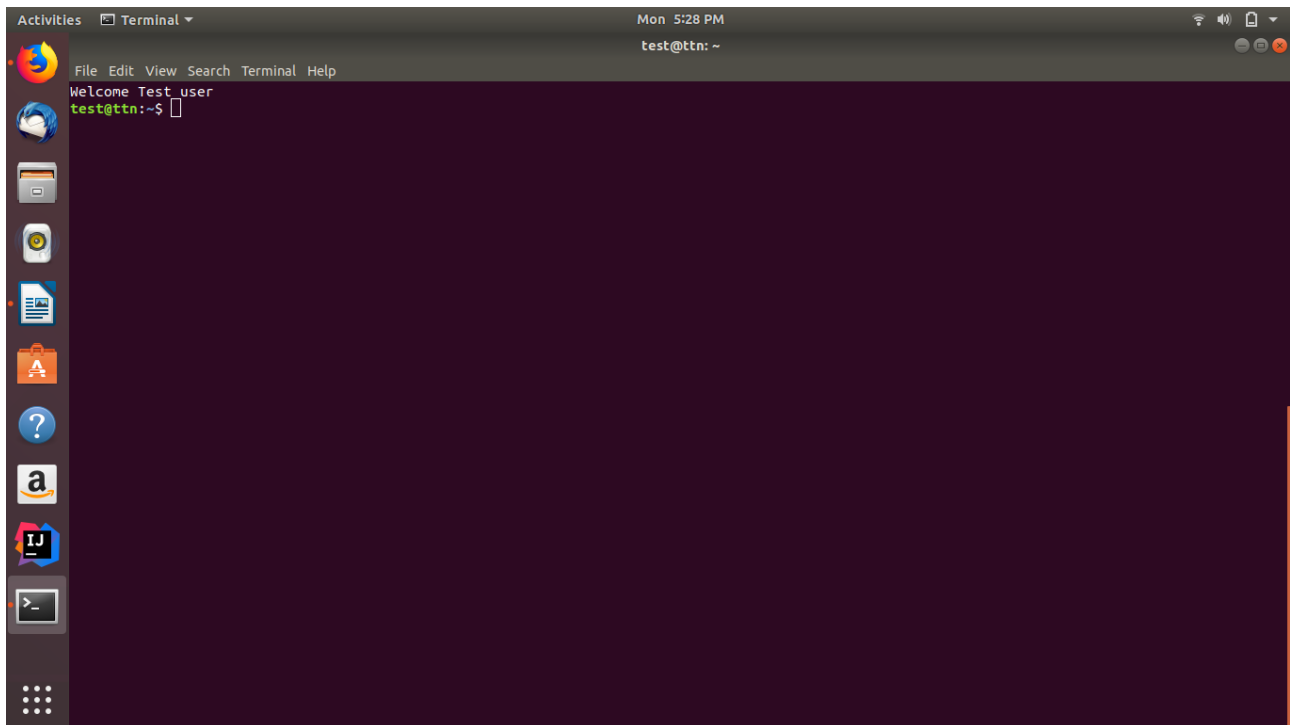
```
Activities Terminal Mon 5:18 PM
ttn@ttn: /tmp

ttn@ttn:~/exercise$ alias siddharth="touch /tmp/aliastesting"
ttn@ttn:~/exercise$ ll
total 24
drwxr-xr-x 3 ttn test 4096 Feb 4 16:19 ./
drwxr-xr-x 20 ttn test 4096 Feb 4 16:24 ../
drwxr-xr-x 3 ttn test 4096 Feb 4 15:53 dir1/
-rw-r--r-- 1 ttn test 12 Feb 4 16:02 file1.txt
-rwxrwxr-x 1 ttn test 58 Feb 4 17:08 output*
-rw-r--r-- 1 ttn test 2402 Feb 4 16:07 passwd_backup
ttn@ttn:~/exercise$ siddharth
ttn@ttn:~/exercise$ ll
total 24
drwxr-xr-x 3 ttn test 4096 Feb 4 16:19 ./
drwxr-xr-x 20 ttn test 4096 Feb 4 16:24 ../
drwxr-xr-x 3 ttn test 4096 Feb 4 15:53 dir1/
-rw-r--r-- 1 ttn test 12 Feb 4 16:02 file1.txt
-rwxrwxr-x 1 ttn test 58 Feb 4 17:08 output*
-rw-r--r-- 1 ttn test 2402 Feb 4 16:07 passwd_backup
ttn@ttn:~/exercise$ cd /tmp
ttn@ttn:/tmp$ ll
total 72
drwxrwxrwt 17 root root 4096 Feb 4 17:18 ./
drwxr-xr-x 24 root root 4096 Jan 30 23:40 ../
-rw-r--r-- 1 ttn test 0 Feb 4 17:18 aliastesting
-rw----- 1 ttn ttn 0 Feb 4 15:50 config-err-hfo2lT
drwxrwxrwt 2 root root 4096 Feb 4 15:49 .font-unix/
drwxrwxrwt 2 root root 4096 Feb 4 15:50 .ICE-unix/
drwx----- 2 ttn ttn 4096 Feb 4 17:16 lu2370q6u48o.tmp/
srwxrwxr-x 1 ttn ttn 0 Feb 4 15:54 OSL_PIPE_1000_SingleOfficeIPC_cfa729fc67be8cf99063327bc0904361=
drwx----- 2 ttn ttn 4096 Feb 4 15:50 ssh-iVu2eYn20nz8/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-bolt.service-fnVvdw/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-color.service-e0cTyk/
drwx----- 3 root root 4096 Feb 4 15:50 systemd-private-e24fd90a012c4b5281de37ef732d221e-fwupd.service-7YVguQ/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-rtkit-daemon.service-jVevMv/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-systemd-resolved.service-WLtc22/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-systemd-timesyncd.service-L4Y8p/
drwx----- 2 ttn ttn 4096 Feb 4 15:50 Temp-db12b187-08ee-4683-89b1-7a9d4acae74/
drwx----- 2 ttn ttn 4096 Feb 4 15:50 Temp-ea1c9441-fbc0-428d-b893-c362e6153d12/
```

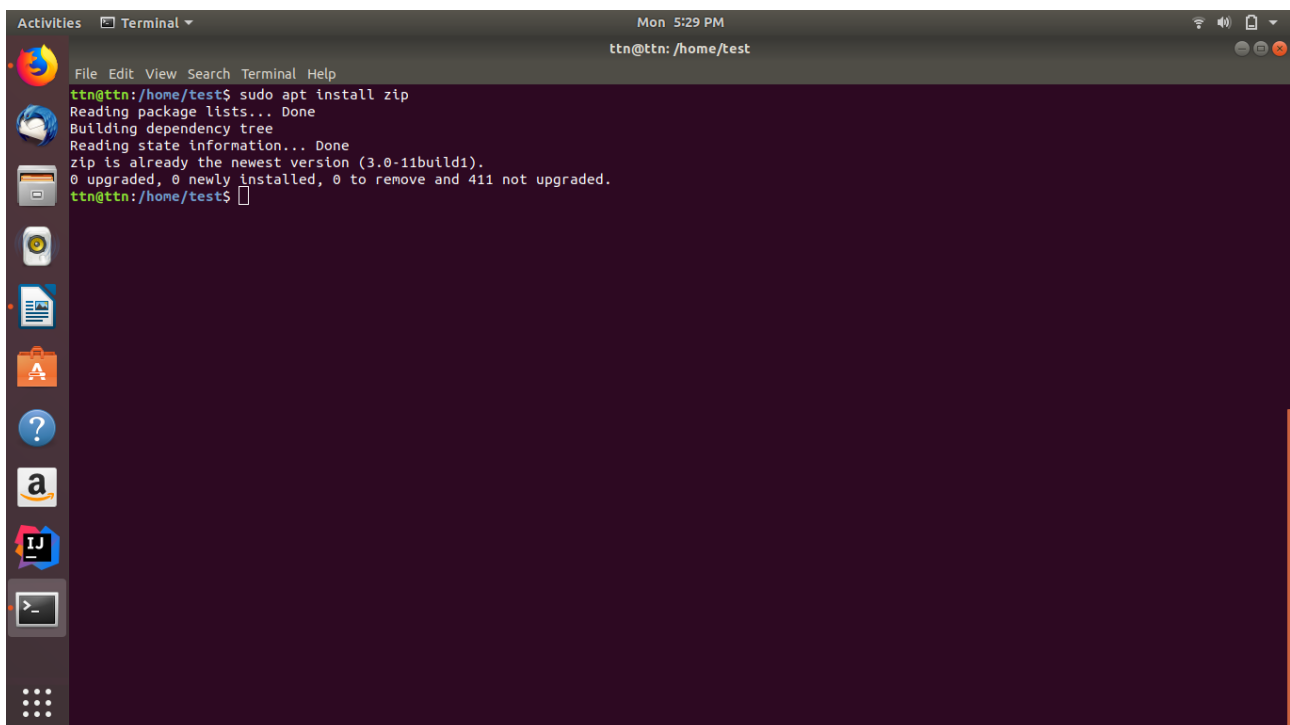
Ans 12

```
Activities Terminal Mon 5:27 PM
test@ttn: ~

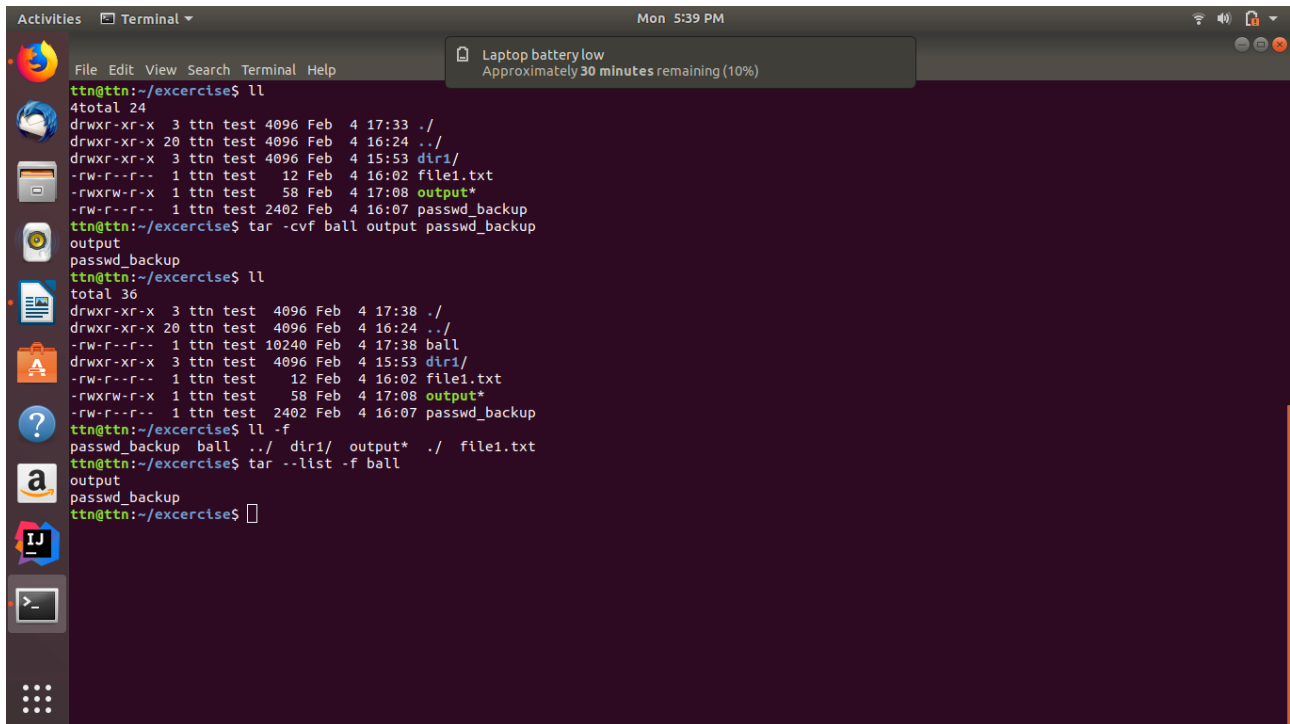
Get:1 http://in.archive.ubuntu.com/ubuntu bionic/main amd64 vim-runtime all 2:8.0.1453-1ubuntu1 [5,437 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu bionic/main amd64 vim amd64 2:8.0.1453-1ubuntu1 [1,152 kB]
Fetched 6,589 kB in 30s (221 kB/s)
Selecting previously unselected package vim-runtime.
(Reading database ... 125726 files and directories currently installed.)
Preparing to unpack .../vim-runtime_2%3a8.0.1453-1ubuntu1_all.deb ...
Adding 'diversion of /usr/share/vim/vim80/doc/help.txt to /usr/share/vim/vim80/doc/help.txt.vim-tiny by vim-runtime'
Adding 'diversion of /usr/share/vim/vim80/doc/tags to /usr/share/vim/vim80/doc/tags.vim-tiny by vim-runtime'
Unpacking vim-runtime (2:8.0.1453-1ubuntu1) ...
Selecting previously unselected package vim.
Preparing to unpack .../vim_2%3a8.0.1453-1ubuntu1_amd64.deb ...
Unpacking vim (2:8.0.1453-1ubuntu1) ...
Processing triggers for man-db (2.8.3-2) ...
Setting up vim-runtime (2:8.0.1453-1ubuntu1) ...
Setting up vim (2:8.0.1453-1ubuntu1) ...
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vim (vim) in auto mode
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vimdiff (vimdiff) in auto mode
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/rvim (rvim) in auto mode
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/rview (rview) in auto mode
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vi (vi) in auto mode
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/view (view) in auto mode
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/ex (ex) in auto mode
ttn@ttn:/home/test$ su test
Password:
test@ttn:~$ ll
total 32
drwxr-xr-x 2 test test 4096 Feb 4 17:23 ./
drwxr-xr-x 5 root root 4096 Feb 4 16:24 ../
-rw-r--r-- 1 test test 220 Feb 4 16:24 .bash_logout
-rw-r--r-- 1 test test 3771 Feb 4 16:24 .bashrc
-rw-r--r-- 1 test test 8980 Feb 4 16:24 examples.desktop
-rw-r--r-- 1 test test 807 Feb 4 16:24 .profile
test@ttn:~$ vim .bashrc
test@ttn:~$ su ttn
Password:
ttn@ttn:/home/test$ su test
Password:
```

Ans 13



Ans 14



A terminal window titled "Terminal" with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar (Mon 5:39 PM). A notification bubble at the top right says "Laptop battery low. Approximately 30 minutes remaining (10%)". The terminal shows the following commands and output:

```
ttn@ttn:~/exercise$ ll
total 24
drwxr-xr-x 3 ttn test 4096 Feb  4 17:33 ./
drwxr-xr-x 20 ttn test 4096 Feb  4 16:24 ../
drwxr-xr-x 3 ttn test 4096 Feb  4 15:53 dir1/
-rw-r--r-- 1 ttn test  12 Feb  4 16:02 file1.txt
-rwxr--r-x 1 ttn test  58 Feb  4 17:08 output*
-rw-r--r-- 1 ttn test 2402 Feb  4 16:07 passwd_backup

ttn@ttn:~/exercise$ tar -cvf ball output passwd_backup
output
passwd_backup

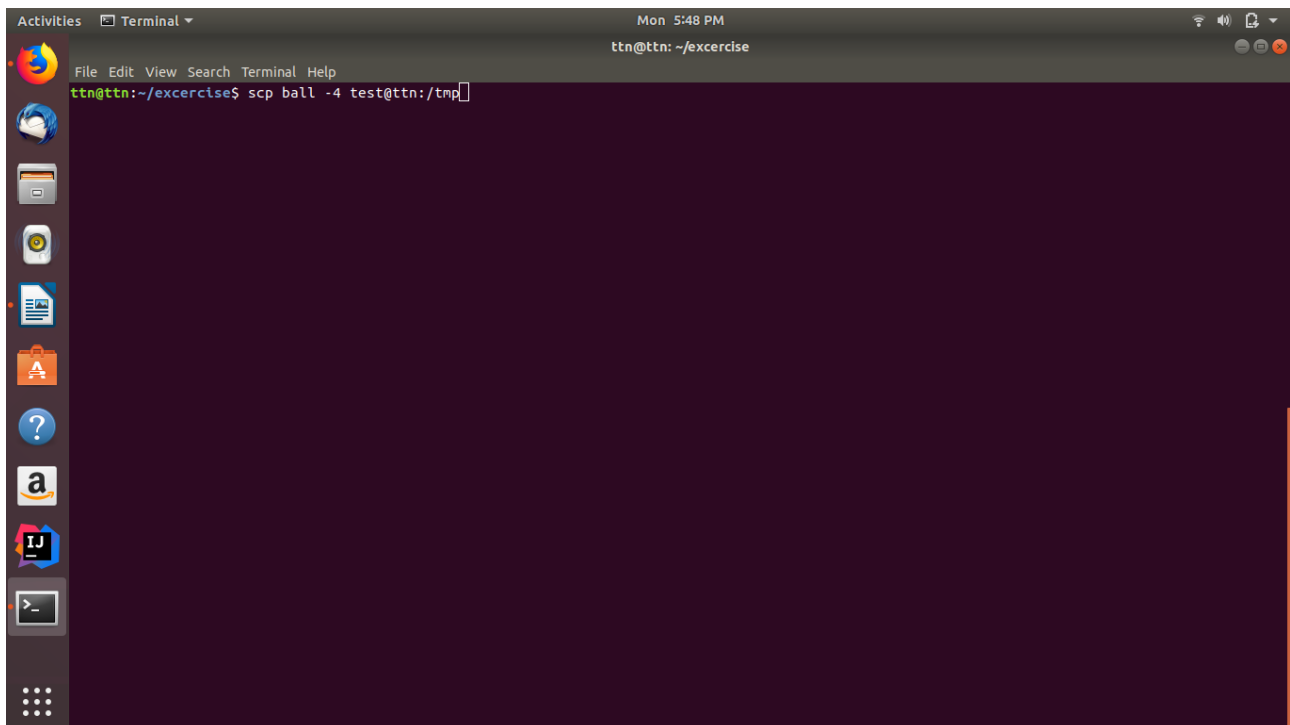
ttn@ttn:~/exercise$ ll
total 36
drwxr-xr-x 3 ttn test 4096 Feb  4 17:38 ./
drwxr-xr-x 20 ttn test 4096 Feb  4 16:24 ../
-rw-r--r-- 1 ttn test 10240 Feb  4 17:38 ball
drwxr-xr-x 3 ttn test 4096 Feb  4 15:53 dir1/
-rw-r--r-- 1 ttn test  12 Feb  4 16:02 file1.txt
-rwxr--r-x 1 ttn test  58 Feb  4 17:08 output*
-rw-r--r-- 1 ttn test 2402 Feb  4 16:07 passwd_backup

ttn@ttn:~/exercise$ ll -f
passwd_backup ball ../ dir1/ output* ./ file1.txt

ttn@ttn:~/exercise$ tar --list -f ball
output
passwd_backup

ttn@ttn:~/exercise$
```

Ans 15



A terminal window titled "Terminal" with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar (Mon 5:48 PM). The terminal shows the following command and prompt:

```
ttn@ttn:~/exercise$ scp ball -4 test@ttn:/tmp
```

Ans 16

scp [test@ttn:ball](#) /tmp /

ssh -l [test@ttn](#)

tar -xvf ball

Ans 17

```
Activities Terminal Mon 6:00 PM ttn@ttn: ~
File Edit View Search Terminal Help
ttn@ttn:~$ wget https://pbs.twimg.com/profile_images/760027937055903744/a0oarSzT_400x400.jpg
--2019-02-04 18:00:10-- https://pbs.twimg.com/profile_images/760027937055903744/a0oarSzT_400x400.jpg
Resolving pbs.twimg.com (pbs.twimg.com)... 151.101.8.159
Connecting to pbs.twimg.com (pbs.twimg.com)|151.101.8.159|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 8424 (8.2K) [image/jpeg]
Saving to: 'a0oarSzT_400x400.jpg'

a0oarSzT_400x400.jpg      100%[=====] 8.23K --.-KB/s  in 0s

2019-02-04 18:00:10 (29.5 MB/s) - 'a0oarSzT_400x400.jpg' saved [8424/8424]

ttn@ttn:~$ ll
total 132
drwxr-xr-x 20 ttn test 4096 Feb  4 18:00 ./
drwxr-xr-x  5 root root 4096 Feb  4 16:24 ../
-rw-r--r--  1 ttn test 8424 Aug  1 2016 a0oarSzT_400x400.jpg
drwxr-xr-x  2 ttn test 4096 Feb  2 12:46 .android/
-rw-----  1 ttn test  10 Feb  2 12:46 .bash_history
-rw-r--r--  1 ttn test 220 Jan 30 23:40 .bash_logout
-rw-r--r--  1 ttn test 3771 Jan 30 23:40 .bashrc
drwx----- 15 ttn test 4096 Feb  2 13:30 .cache/
drwx----- 16 ttn test 4096 Feb  4 15:53 .config/
drwxr-xr-x  3 ttn test 4096 Feb  4 17:42 Desktop/
drwxr-xr-x  2 ttn test 4096 Jan 31 05:18 Documents/
drwxr-xr-x  2 ttn test 4096 Feb  2 13:31 Downloads/
-rw-r--r--  1 ttn test 8980 Jan 30 23:40 examples.desktop
drwxr-xr-x  3 ttn test 4096 Feb  4 17:38 excercise/
drwx-----  3 ttn test 4096 Feb  2 12:46 .gnome/
drwx-----  3 ttn test 4096 Jan 31 05:18 .gnupg/
-rw-----  1 ttn test 1224 Feb  4 15:50 .ICEauthority
drwxr-xr-x  4 ttn test 4096 Feb  2 12:45 .IntelliJ IDEA2018.3/
drwxr-xr-x  4 ttn test 4096 Feb  2 12:45 .java/
drwx-----  3 ttn test 4096 Jan 31 05:18 .local/
drwx-----  5 ttn test 4096 Feb  2 21:24 .mozilla/
drwxr-xr-x  2 ttn test 4096 Jan 31 05:18 Music/
drwxr-xr-x  2 ttn test 4096 Feb  4 15:55 Pictures/
-rw-r--r--  1 ttn test  807 Jan 30 23:40 .profile
```

```
Activities Terminal Mon 6:01 PM ttn@ttn: ~/Desktop
File Edit View Search Terminal Help
ttn@ttn:~$ mv a0oarSzT_400x400.jpg ~/Desktop/
ttn@ttn:~$ cd Desktop/
ttn@ttn:~/Desktop$ ll
total 3024
drwxr-xr-x  3 ttn test  4096 Feb  4 18:01 ./
drwxr-xr-x 20 ttn test  4096 Feb  4 18:01 ../
-rw-r--r--  1 ttn test  8424 Aug  1 2016 a0oarSzT_400x400.jpg
drwxrwxr-x  9 ttn test  4096 Feb  2 12:43 idea-IU-183.5429.30/
-rw-rw-r--  1 ttn test 3060588 Feb  4 17:42 'Linux Exercise.odt'
-rw-rw-r--  1 ttn ttn    65 Feb  4 17:42 '._lock.Linux Exercise.odt#'
ttn@ttn:~/Desktop$
```

Ans 18

1. man [command name]
2. [command name] --help

Ans 19

```
Activities Terminal Mon 6:05 PM
ttn@ttn: /tmp

File Edit View Search Terminal Help
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-bolt.service-fnVvdw/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-colord.service-e0cTyK/
drwx----- 3 root root 4096 Feb 4 15:50 systemd-private-e24fd90a012c4b5281de37ef732d221e-fwupd.service-7YVguQ/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-rtkit-daemon.service-jVevMv/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-systemd-resolved.service-WLtc22/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-systemd-timesyncd.service-l44YBp/
drwx----- 2 ttn ttn 4096 Feb 4 15:50 Temp-db12b187-08ee-4683-89b1-7a9d4acaee74/
drwx----- 2 ttn ttn 4096 Feb 4 15:50 Temp-ea1c9441-fbc0-428d-b893-c362e6153d12/
drwxrwxrwt 2 root root 4096 Feb 4 15:49 .test-units/
-r--r--r-- 1 gdm gdm 11 Feb 4 15:49 .X1024-Lock
drwxrwxrwt 2 root root 4096 Feb 4 15:50 .X11-units/
drwxrwxrwt 2 root root 4096 Feb 4 15:49 .XIM-units/
ttn@ttn: /tmp$ ln -s /etc/services /tmp/portsinfo
ttn@ttn: /tmp$ ll
total 72
drwxrwxrwt 17 root root 4096 Feb 4 18:04 ./
drwxr-xr-x 24 root root 4096 Jan 30 23:40 ../
-rw-r--r-- 1 ttn test 0 Feb 4 17:18 aliastesting
-rw----- 1 ttn ttn 0 Feb 4 15:50 config-err-hfo2iT
drwxrwxrwt 2 root root 4096 Feb 4 15:49 .font-units/
drwxrwxrwt 2 root root 4096 Feb 4 15:50 .ICE-units/
drwx----- 2 ttn ttn 4096 Feb 4 18:03 lu2370q6u48o.tmp/
srwxrwxr-x 1 ttn ttn 0 Feb 4 15:54 OSL_PIPE_1000_SingleOfficeIPC_cfa729fc67be8cf99063327bc0904361=
lrwxrwxrwx 1 ttn test 13 Feb 4 18:04 portsinfo -> /etc/services
drwx----- 2 ttn ttn 4096 Feb 4 15:50 ssh-iVu2eYn20nz8/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-bolt.service-fnVvdw/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-colord.service-e0cTyK/
drwx----- 3 root root 4096 Feb 4 15:50 systemd-private-e24fd90a012c4b5281de37ef732d221e-fwupd.service-7YVguQ/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-rtkit-daemon.service-jVevMv/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-systemd-resolved.service-WLtc22/
drwx----- 3 root root 4096 Feb 4 15:49 systemd-private-e24fd90a012c4b5281de37ef732d221e-systemd-timesyncd.service-l44YBp/
drwx----- 2 ttn ttn 4096 Feb 4 15:50 Temp-db12b187-08ee-4683-89b1-7a9d4acaee74/
drwx----- 2 ttn ttn 4096 Feb 4 15:50 Temp-ea1c9441-fbc0-428d-b893-c362e6153d12/
drwxrwxrwt 2 root root 4096 Feb 4 15:49 .test-units/
-r--r--r-- 1 gdm gdm 11 Feb 4 15:49 .X1024-Lock
drwxrwxrwt 2 root root 4096 Feb 4 15:50 .X11-units/
drwxrwxrwt 2 root root 4096 Feb 4 15:49 .XIM-units/
ttn@ttn: /tmp$
```

Ans 20

sudo updatedb
whereis xyz