

FOSS LAB

ASSIGNMENT

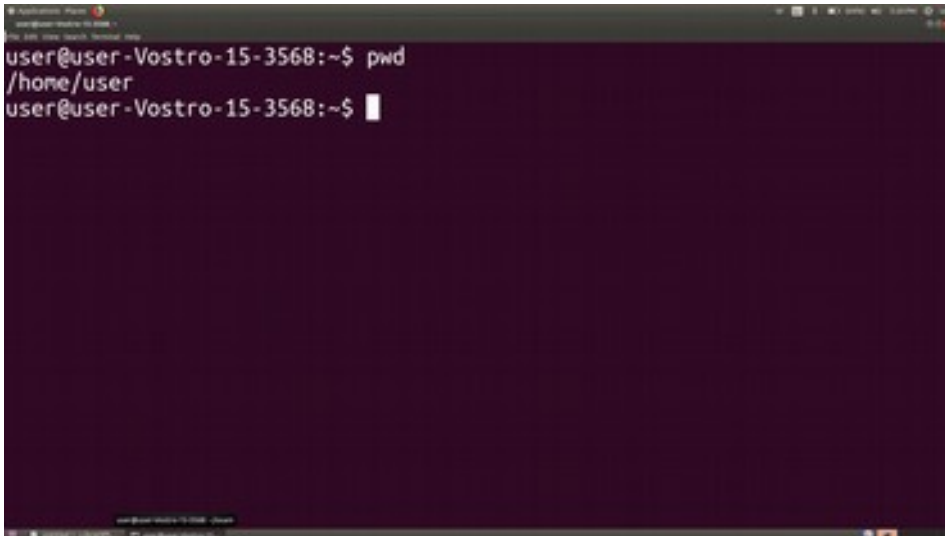
Submitted By

ARYASREE M P

S3 CS

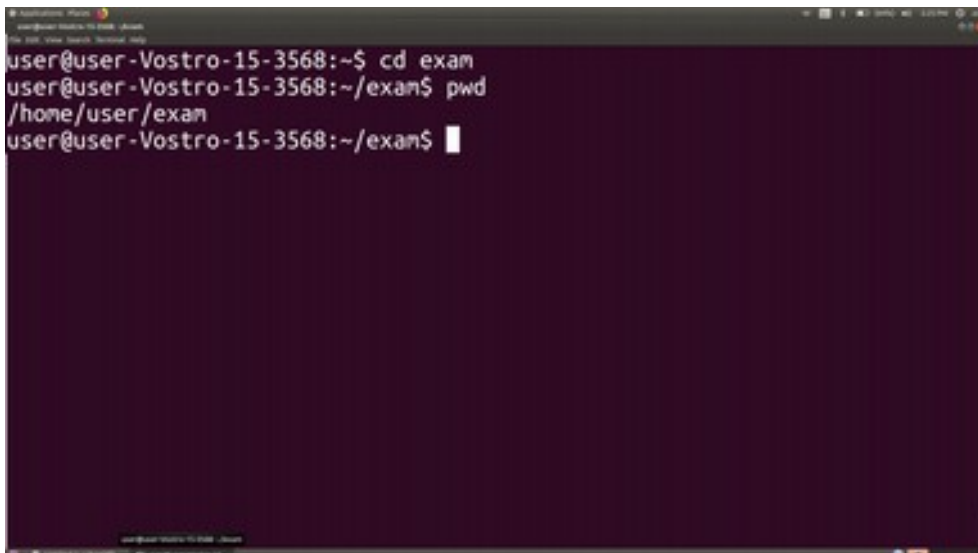
Roll NO:26

1.Display your current directory

A terminal window titled 'Applications - Ubuntu' with a subtitle 'user@user-Vostro-15-3568:~\$'. The prompt is 'user@user-Vostro-15-3568:~\$'. The command 'pwd' has been entered, and the output is '/home/user'. The prompt is now 'user@user-Vostro-15-3568:~\$' with a cursor.

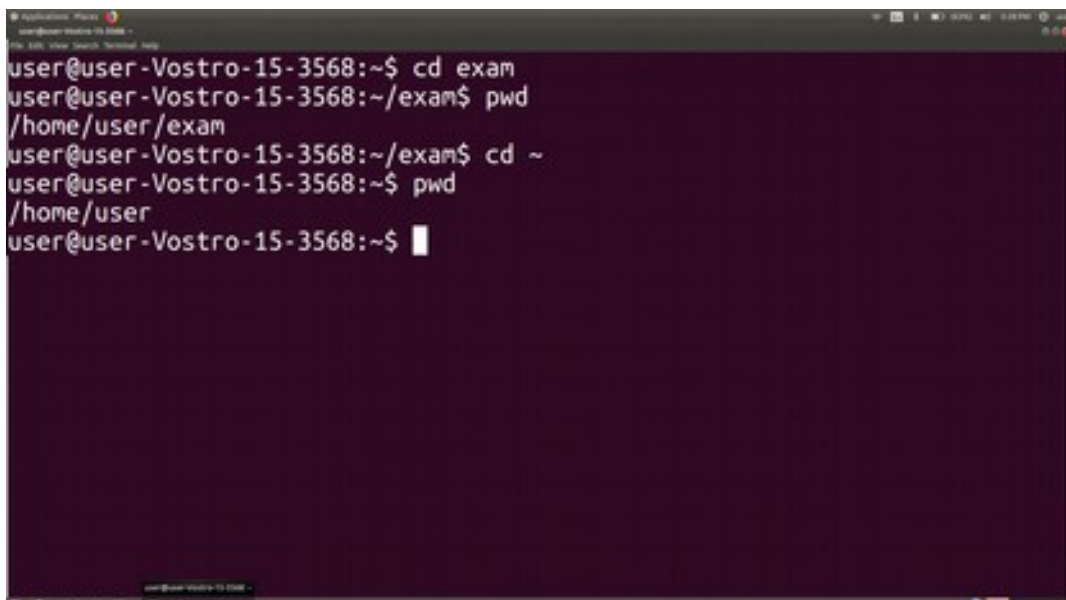
```
user@user-Vostro-15-3568:~$ pwd
/home/user
user@user-Vostro-15-3568:~$
```

2.Change to the /etc directory

A terminal window titled 'Applications - Ubuntu' with a subtitle 'user@user-Vostro-15-3568:~/exam'. The prompt is 'user@user-Vostro-15-3568:~/exam\$'. The command 'cd exam' has been entered, and the output is '/home/user/exam'. The prompt is now 'user@user-Vostro-15-3568:~/exam\$' with a cursor.

```
user@user-Vostro-15-3568:~$ cd exam
user@user-Vostro-15-3568:~/exam$ pwd
/home/user/exam
user@user-Vostro-15-3568:~/exam$
```

3. Change to home directory using a single command

A terminal window titled 'Applications - Ubuntu' with a subtitle 'user@user-Vostro-15-3568:~/exam'. The prompt is 'user@user-Vostro-15-3568:~/exam\$'. The command 'cd ~' has been entered, and the output is '/home/user'. The prompt is now 'user@user-Vostro-15-3568:~\$' with a cursor.

```
user@user-Vostro-15-3568:~$ cd exam
user@user-Vostro-15-3568:~/exam$ pwd
/home/user/exam
user@user-Vostro-15-3568:~/exam$ cd ~
user@user-Vostro-15-3568:~$ pwd
/home/user
user@user-Vostro-15-3568:~$
```

4. Change to the parent directory of the current directory

```
user@user-Vostro-15-3568:~$ cd exam
user@user-Vostro-15-3568:~/exam$ cd etc
user@user-Vostro-15-3568:~/exam/etc$ pwd
/home/user/exam/etc
user@user-Vostro-15-3568:~/exam/etc$ cd ..
user@user-Vostro-15-3568:~/exam$ pwd
/home/user/exam
user@user-Vostro-15-3568:~/exam$
```

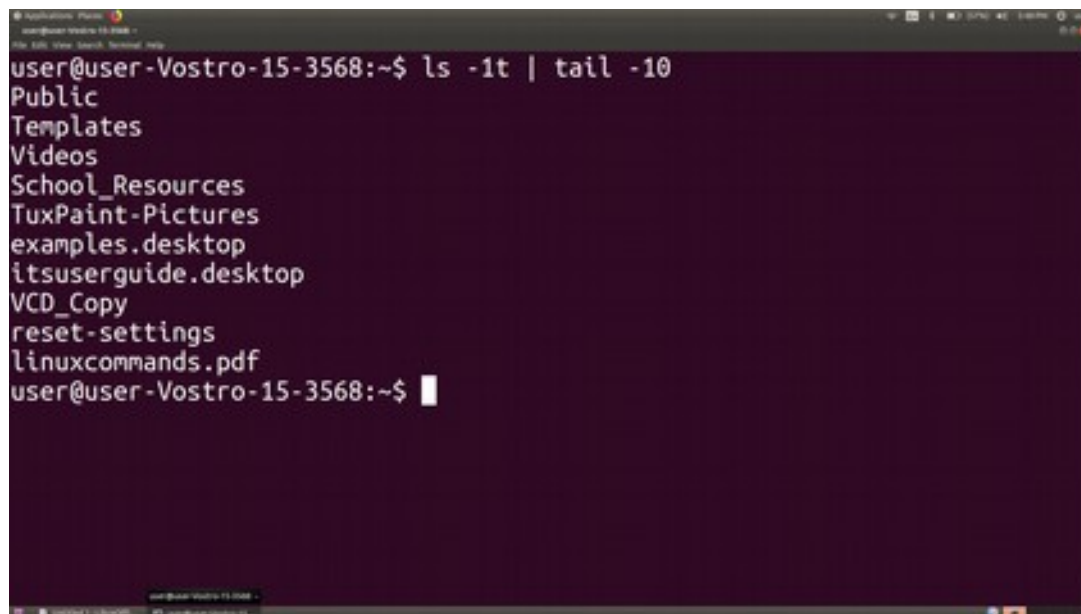
5. Go to the root directory

```
user@user-Vostro-15-3568:~$ cd exam
user@user-Vostro-15-3568:~/exam$ cd etc
user@user-Vostro-15-3568:~/exam/etc$ cd ..
user@user-Vostro-15-3568:~/exam$ pwd
/home/user/exam
user@user-Vostro-15-3568:~/exam$ cd ..
user@user-Vostro-15-3568:~$ pwd
/home/user
user@user-Vostro-15-3568:~$
```

6. Give a long listing of the root directory

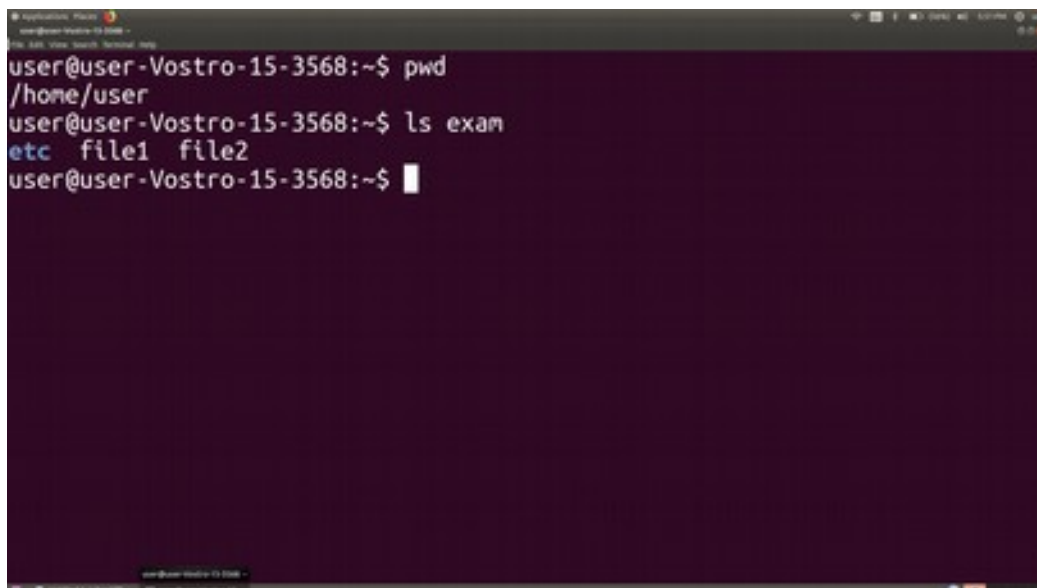
```
user@user-Vostro-15-3568:~/exam/etc$ cd ..
user@user-Vostro-15-3568:~/exam$ pwd
/home/user/exam
user@user-Vostro-15-3568:~/exam$ cd ..
user@user-Vostro-15-3568:~$ pwd
/home/user
user@user-Vostro-15-3568:~$ ls
a                file2            prgrm3.c.save
ac               file.cpp        progr3.c
ad               foss            project
a.out           graph0.c        Public
arya            graph1.c        que.c
as              graph2.c        que.c.save
b               graph.c         reset-settings
bin_search.c    index.html      School_Resources
capi.c          in_post.c       tree
capi.c.save     ltuserguide.desktop
cd              linkedlist.c.save
Desktop         linklist.c      Templates
Documents       linuxcommands.pdf
Downloads       llap.c          tmp
Brighti-Images mult.c          tree.c
etc             Music           tree.c.save
exam            odd_even.c      tree.c.save.1
examples.desktop odd_even.c.save tree.c.save.2
exn             Pictures        TuxPalat-Pictures
exn.c           pol.save        VCD_Copy
exn.c           postfix.c       Videos
fl              postfix.c.save  vidhyarangan.odp
file            prgrm1.c        x.c
user@user-Vostro-15-3568:~$
```

7. Give a listing of the last 10 files in the root directory



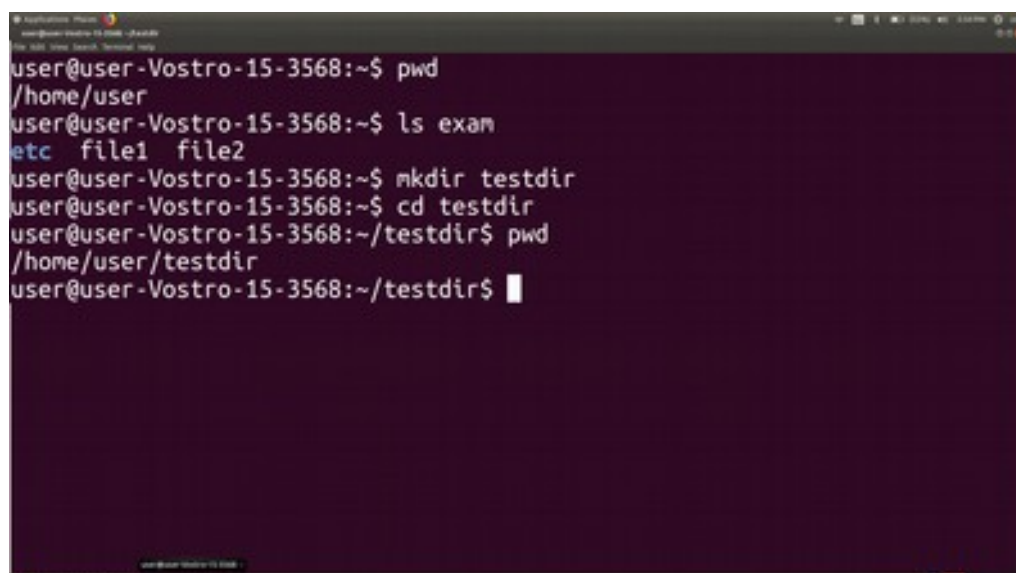
```
user@user-Vostro-15-3568:~$ ls -lt | tail -10
Public
Templates
Videos
School_Resources
TuxPaint-Pictures
examples.desktop
itsuserguide.desktop
VCD_Copy
reset-settings
linuxcommands.pdf
user@user-Vostro-15-3568:~$
```

8. Stay where you are and list the contents



```
user@user-Vostro-15-3568:~$ pwd
/home/user
user@user-Vostro-15-3568:~$ ls exam
etc file1 file2
user@user-Vostro-15-3568:~$
```

9. Create a directory testdir in your home directory



```
user@user-Vostro-15-3568:~$ pwd
/home/user
user@user-Vostro-15-3568:~$ ls exam
etc file1 file2
user@user-Vostro-15-3568:~$ mkdir testdir
user@user-Vostro-15-3568:~$ cd testdir
user@user-Vostro-15-3568:~/testdir$ pwd
/home/user/testdir
user@user-Vostro-15-3568:~/testdir$
```

10.Change to the /etc directory,stay there and create directory newdir in your home directory

```
user@user-Vostro-15-3568:~$ cd testdir
user@user-Vostro-15-3568:~/testdir$ pwd
/home/user/testdir
user@user-Vostro-15-3568:~/testdir$ mkdir ~/newdir
user@user-Vostro-15-3568:~/testdir$ pwd
/home/user/testdir
user@user-Vostro-15-3568:~/testdir$ cd ..
user@user-Vostro-15-3568:~$ ls
a                file.cpp          prog1.c
ac               foss              project
ad              graph0.c          Public
a.out           graph1.c          que.c
arya            graph2.c          que.c.save
as              graph.c           reset-settings
b               index.html        School_Resources
bin_search.c    in_post.c         sree
c3p1.c          itsuserguide.desktop stack.c
```

11.Create in one command the directories ~/dir1/dir2/dir3

```
user@user-Vostro-15-3568:~$ mkdir -p dir1/dir2/dir3
user@user-Vostro-15-3568:~$ cd dir1
user@user-Vostro-15-3568:~/dir1$ ls
dir2
user@user-Vostro-15-3568:~/dir1$ cd dir2
user@user-Vostro-15-3568:~/dir1/dir2$ ls
dir3
user@user-Vostro-15-3568:~/dir1/dir2$
```

12.Display the calendar of April 2019

```
user@user-Vostro-15-3568:~$ cal 04 2019
April 2019
Su Mo Tu We Th Fr Sa
    1  2  3  4  5  6
 7  8  9 10 11 12 13
14 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29 30
user@user-Vostro-15-3568:~$
```


13. Display that 'There are files in my current directory'. The should be filled with the count of the files.

```

user@user-Vostro-15-3568:~$ echo There are $(ls | wc -l) files in my current directory
There are 78 files in my current directory
user@user-Vostro-15-3568:~$ ls
a          b          Countlist.txt  Drishti-images  exn.c          FileList.txt  inde
ac         bin_search.c  Countries.txt  etc              f1             foss          in_p
ad         c3p1.c       Desktop        exam             file           graph0.c      itsu
a.out     c3p1.c.save  dir1           examples.desktop file2          graph1.c      link
arya      Capstory.txt Documents       exm             file.cpp       graph2.c      link
as        cd           Downloads      exn.            Filelist.txt  graph.c       linu

```

14. List all the files (including hidden files) in your home directory.

```

user@user-Vostro-15-3568:~$ ls -a
.          .config      linklist.c    prgrni.c.save  tree.c.save
..         Desktop     linuxcommands.pdf .profile       tree.c.save.1
a          .git         lisp.c        progl.c        tree.c.save.2
ac         .gitconfig  llsp.c        project        .tuxpaint
ad         .gnssu.lock .local        Public         TuxPaint-Pictures
a.out     .gnome2     .mozilla      que.c          .tuxpaintrc
arya      .gnome2_private .mult.c       qye.c.save    VCD_Copy
as        .gphoto     .Music        reset-settings Videos
.audacity-data .gnppg      .mypaint      .rpnob        vidhyarangan.odp
b         examples.desktop graph0.c       School_Resources .vscode
.bash_history exm          graph1.c      sree          .xauthority
.bash_logout exn.c        graph2.c      .ssh          x.c
.bashrc     exm.c        graph.c       stack.c       xf
bin_search.c f1           in_post.c     .sunclckrc   .xinputrc
c3p1.c     file         itsusergulde.desktop pol.save      .xsession-errors
c3p1.c.save file2         .kde          postfix.c     .xsession-errors.old
.cache     file.cpp     linkedlist.c.save prgrni.c      tnp
cd         foss         .tree.c

```

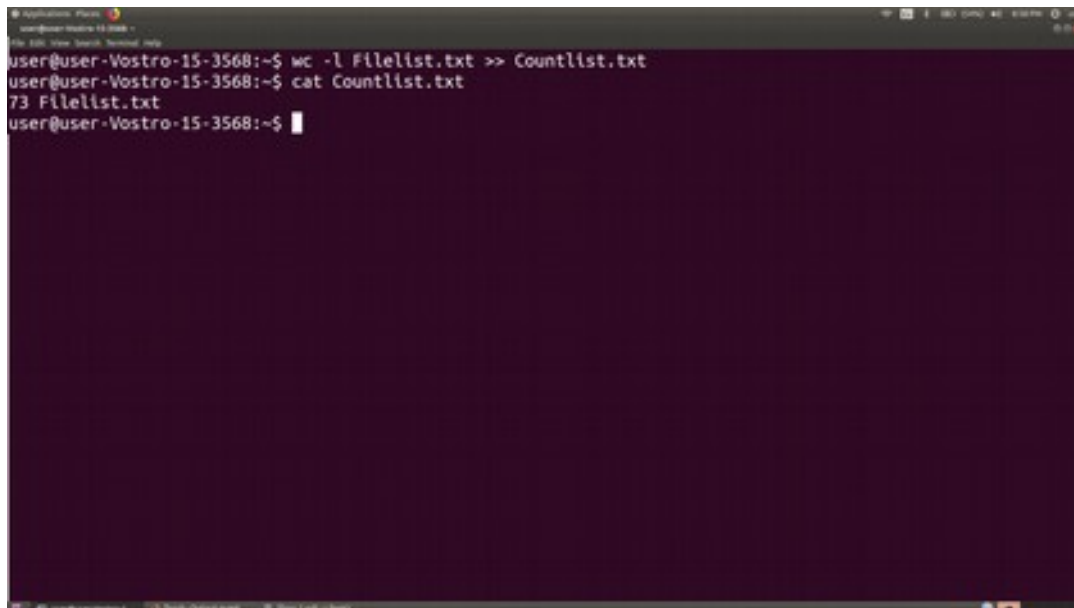
15. Redirect the output of the above command to a new file FileList.txt

```

user@user-Vostro-15-3568:~$ ls -a > FileList.txt
a          .config      linklist.c    prgrni.c.save  tree.c.save
..         Desktop     linuxcommands.pdf .profile       tree.c.save.1
a          .git         lisp.c        progl.c        tree.c.save.2
ac         .gitconfig  llsp.c        project        .tuxpaint
ad         .gnssu.lock .local        Public         TuxPaint-Pictures
a.out     .gnome2     .mozilla      que.c          .tuxpaintrc
arya      .gnome2_private .mult.c       qye.c.save    VCD_Copy
as        .gphoto     .Music        reset-settings Videos
.audacity-data .gnppg      .mypaint      .rpnob        vidhyarangan.odp
b         examples.desktop graph0.c       School_Resources .vscode
.bash_history exm          graph1.c      sree          .xauthority
.bash_logout exn.c        graph2.c      .ssh          x.c
.bashrc     exm.c        graph.c       stack.c       xf
bin_search.c f1           in_post.c     .sunclckrc   .xinputrc
c3p1.c     file         itsusergulde.desktop pol.save      .xsession-errors
c3p1.c.save file2         .kde          postfix.c     .xsession-errors.old
.cache     file.cpp     linkedlist.c.save prgrni.c      tnp
cd         foss         .tree.c

```

16. Redirect the number of lines of FileList.txt to CountFile.txt.



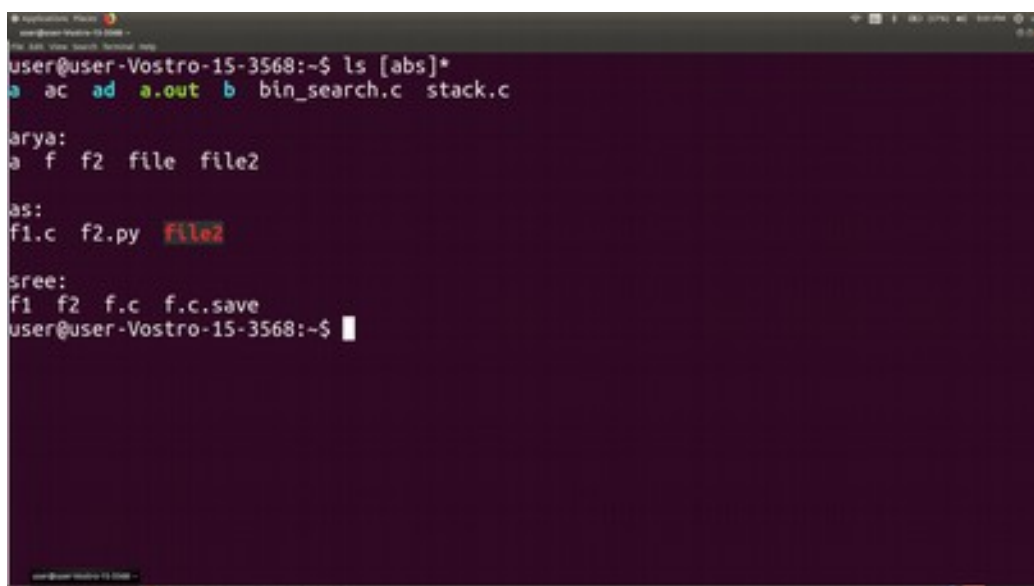
```
user@user-Vostro-15-3568:~$ wc -l Filelist.txt >> Countlist.txt
user@user-Vostro-15-3568:~$ cat Countlist.txt
73 Filelist.txt
user@user-Vostro-15-3568:~$
```

17. List all the files in your home directory starting with ‘s’



```
user@user-Vostro-15-3568:~$ ls | grep '^s'
sree
stack.c
user@user-Vostro-15-3568:~$
```

18. List all the file-names starting with “a”, “b” or “s”



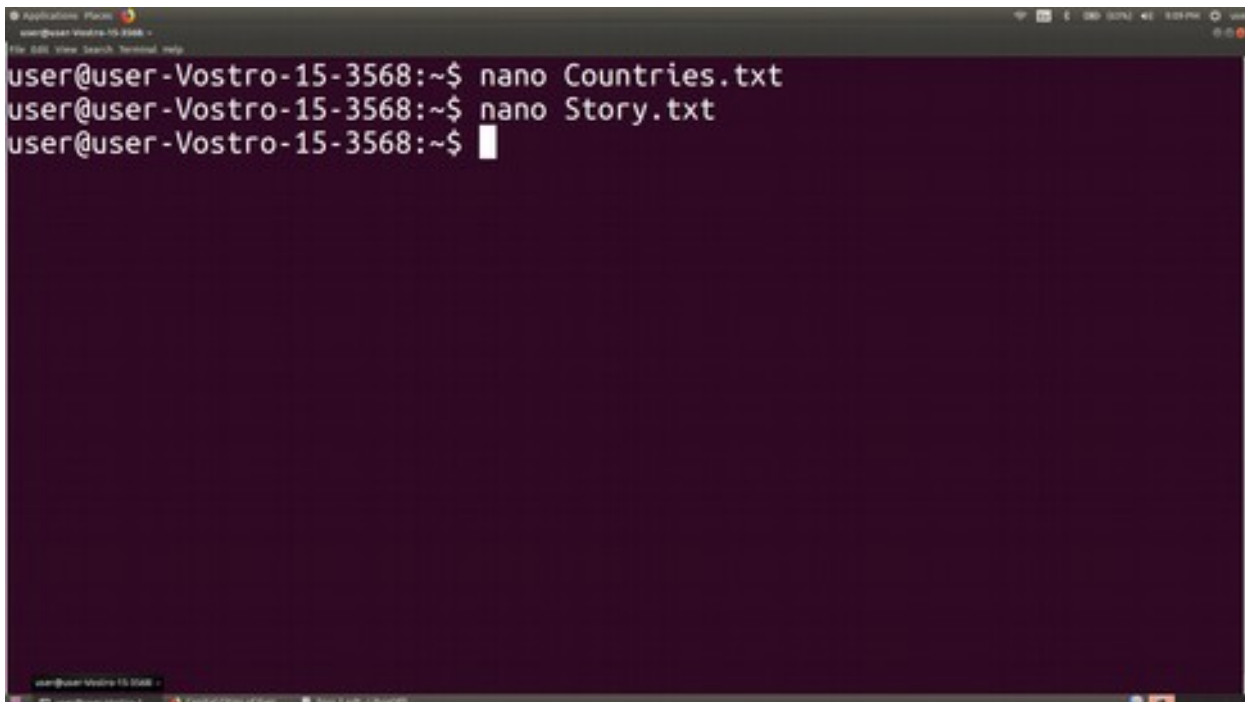
```
user@user-Vostro-15-3568:~$ ls [abs]*
a  ac  ad  a.out  b  bin_search.c  stack.c

arya:
a  f  f2  file  file2

as:
f1.c  f2.py  file2

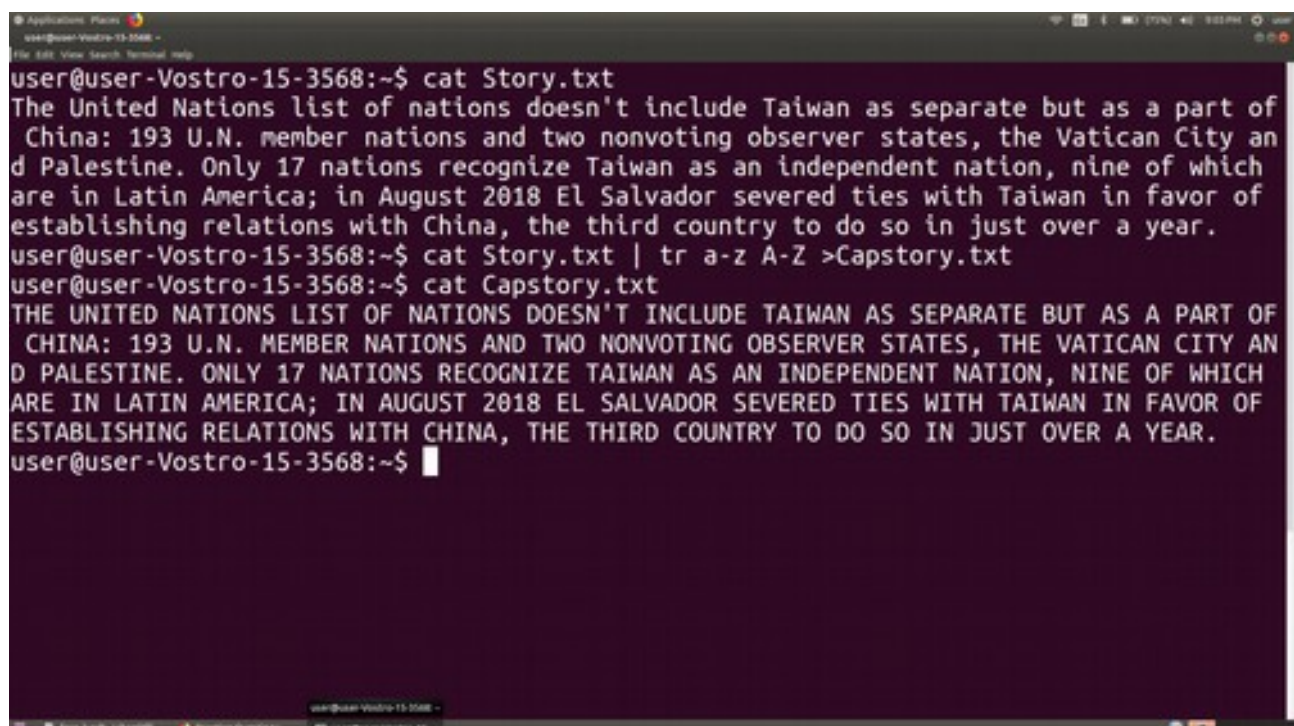
sree:
f1  f2  f.c  f.c.save
user@user-Vostro-15-3568:~$
```

19. Create two files 'Countries.txt', containing country names and their corresponding capital cities and 'Story.txt' contains some arbitrary lines of text.

A terminal window with a dark purple background. The prompt is 'user@user-Vostro-15-3568:~\$'. The user has entered 'nano Countries.txt' and 'nano Story.txt' on separate lines. The cursor is now on a new line after the second command.

```
user@user-Vostro-15-3568:~$ nano Countries.txt
user@user-Vostro-15-3568:~$ nano Story.txt
user@user-Vostro-15-3568:~$
```

20. Convert all lowercase characters from 'Story.txt' to uppercase and store it in a file 'Capstory.txt'.

A terminal window with a dark purple background. The prompt is 'user@user-Vostro-15-3568:~\$'. The user enters 'cat Story.txt', which displays a paragraph of text. Then, the user enters 'cat Story.txt | tr a-z A-Z >Capstory.txt'. Finally, the user enters 'cat Capstory.txt', which displays the same paragraph of text in all uppercase letters.

```
user@user-Vostro-15-3568:~$ cat Story.txt
The United Nations list of nations doesn't include Taiwan as separate but as a part of
China: 193 U.N. member nations and two nonvoting observer states, the Vatican City an
d Palestine. Only 17 nations recognize Taiwan as an independent nation, nine of which
are in Latin America; in August 2018 El Salvador severed ties with Taiwan in favor of
establishing relations with China, the third country to do so in just over a year.
user@user-Vostro-15-3568:~$ cat Story.txt | tr a-z A-Z >Capstory.txt
user@user-Vostro-15-3568:~$ cat Capstory.txt
THE UNITED NATIONS LIST OF NATIONS DOESN'T INCLUDE TAIWAN AS SEPARATE BUT AS A PART OF
CHINA: 193 U.N. MEMBER NATIONS AND TWO NONVOTING OBSERVER STATES, THE VATICAN CITY AN
D PALESTINE. ONLY 17 NATIONS RECOGNIZE TAIWAN AS AN INDEPENDENT NATION, NINE OF WHICH
ARE IN LATIN AMERICA; IN AUGUST 2018 EL SALVADOR SEVERED TIES WITH TAIWAN IN FAVOR OF
ESTABLISHING RELATIONS WITH CHINA, THE THIRD COUNTRY TO DO SO IN JUST OVER A YEAR.
user@user-Vostro-15-3568:~$
```

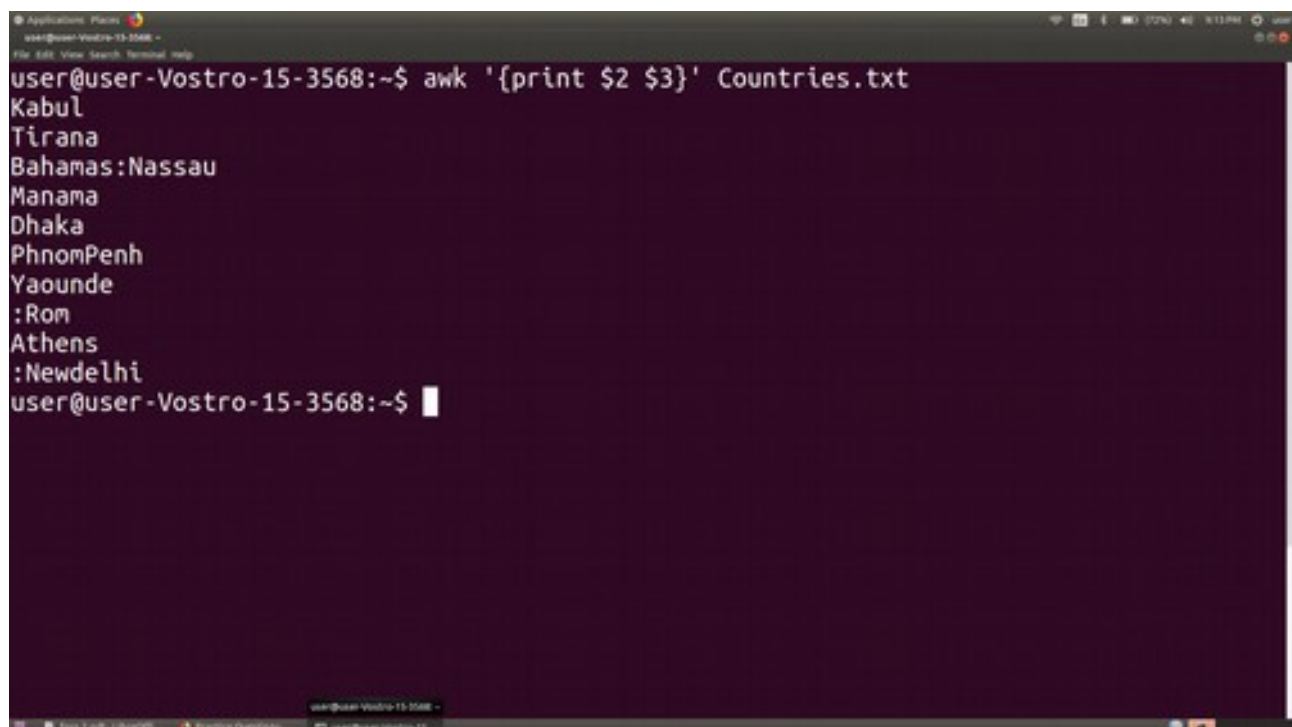

21. Toggle the cases in 'Story.txt' and store it in a file 'Togglestory.txt'.

```
user@user-Vostro-15-3568:~$ (tr 'a-zA-Z' 'A-Za-z' < Story.txt) > Togglestory.txt
user@user-Vostro-15-3568:~$ cat Togglestory.txt
THE UNITED nATIONS LIST OF NATIONS DOESN'T INCLUDE tAIWAN AS SEPARATE BUT AS A PART OF
cHINA: 193 u.n. MEMBER NATIONS AND TWO NONVOTING OBSERVER STATES, THE vATICAN cITY AN
D pALESTINE. oNLY 17 NATIONS RECOGNIZE tAIWAN AS AN INDEPENDENT NATION, NINE OF WHICH
ARE IN LATIN aMERICA; IN aUGUST 2018 eL sALVADOR SEVERED TIES WITH tAIWAN IN FAVOR OF
ESTABLISHING RELATIONS WITH cHINA, THE THIRD COUNTRY TO DO SO IN JUST OVER A YEAR.
user@user-Vostro-15-3568:~$ cat Story.txt
The United Nations list of nations doesn't include Taiwan as separate but as a part of
China: 193 U.N. member nations and two nonvoting observer states, the Vatican City an
d Palestine. Only 17 nations recognize Taiwan as an independent nation, nine of which
are in Latin America; in August 2018 El Salvador severed ties with Taiwan in favor of
establishing relations with China, the third country to do so in just over a year.
user@user-Vostro-15-3568:~$
```

22.Sort the contents of 'Countries.txt'with Capital as the primary sort key and write thesorted output to 'SortCountry.txt' .

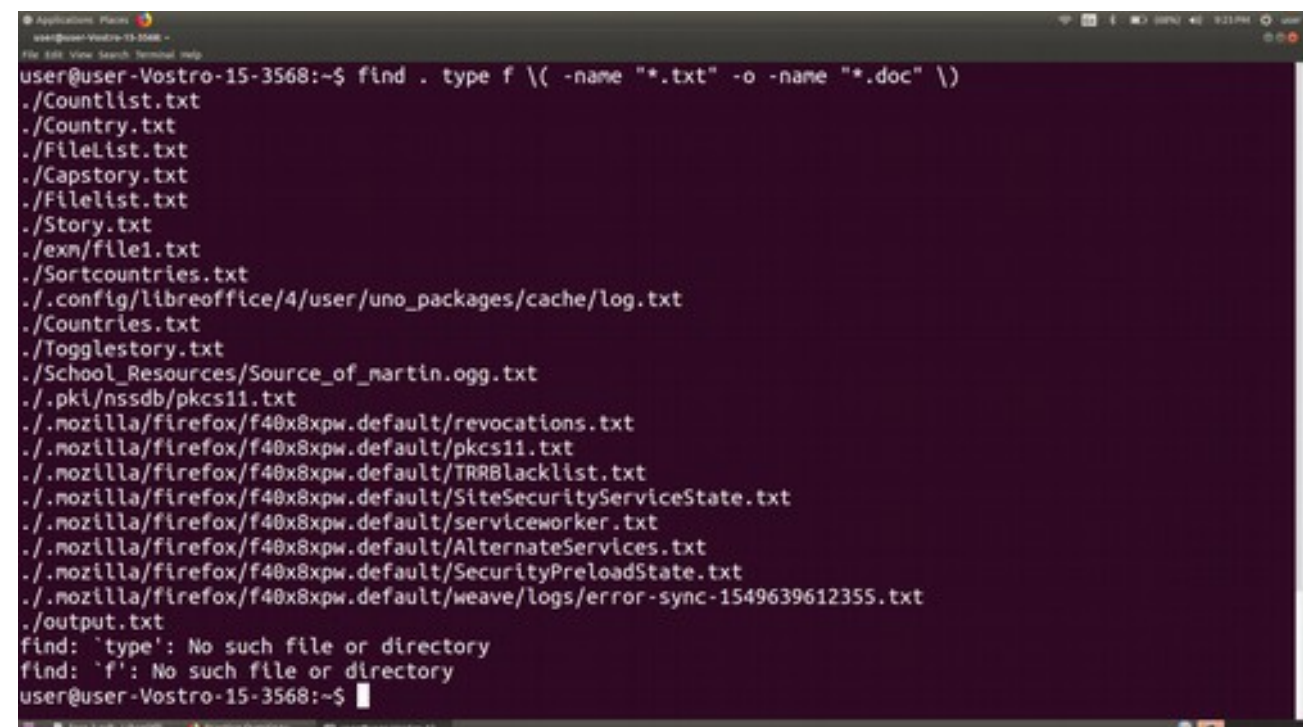
```
user@user-Vostro-15-3568:~$ (sort -k2 Countries.txt) > Sortcountries.txt
user@user-Vostro-15-3568:~$ cat Countries.txt
Afghanistan: Kabul
Albania: Tirana
The Bahamas: Nassau
Bahrain: Manana
Bangladesh: Dhaka
Cambodia: Phnom Penh
Cameroon: Yaounde
Italy : Rom
Greece: Athens
India : Newdelhi
user@user-Vostro-15-3568:~$ cat Sortcountries.txt
Greece: Athens
The Bahamas: Nassau
Bangladesh: Dhaka
Afghanistan: Kabul
Bahrain: Manana
India : Newdelhi
Cambodia: Phnom Penh
Italy : Rom
Albania: Tirana
Cameroon: Yaounde
user@user-Vostro-15-3568:~$
```

23. Display only the capital cities from 'Countries.txt'.



```
user@user-Vostro-15-3568:~$ awk '{print $2 $3}' Countries.txt
Kabul
Tirana
Bahamas:Nassau
Manama
Dhaka
PhnomPenh
Yaounde
:Rom
Athens
:Newdelhi
user@user-Vostro-15-3568:~$
```

24. Locate all '.txt' and '.doc' files in the current directory



```
user@user-Vostro-15-3568:~$ find . type f \( -name "*.txt" -o -name "*.doc" \)
./Countlist.txt
./Country.txt
./Filelist.txt
./Capstory.txt
./Filelist.txt
./Story.txt
./exn/file1.txt
./Sortcountries.txt
./config/libreoffice/4/user/uno_packages/cache/log.txt
./Countries.txt
./Togglestory.txt
./School_Resources/Source_of_martin.ogg.txt
./pki/nssdb/pkcs11.txt
./mozilla/firefox/f40x8xpw.default/revocations.txt
./mozilla/firefox/f40x8xpw.default/pkcs11.txt
./mozilla/firefox/f40x8xpw.default/TRRBlacklist.txt
./mozilla/firefox/f40x8xpw.default/SiteSecurityServiceState.txt
./mozilla/firefox/f40x8xpw.default/serviceworker.txt
./mozilla/firefox/f40x8xpw.default/AlternateServices.txt
./mozilla/firefox/f40x8xpw.default/SecurityPreloadState.txt
./mozilla/firefox/f40x8xpw.default/weave/logs/error-sync-1549639612355.txt
./output.txt
find: 'type': No such file or directory
find: 'f': No such file or directory
user@user-Vostro-15-3568:~$
```

25. Count the number of occurrence of 'the' in 'Story.txt'.



```
user@user-Vostro-15-3568:~$ grep -o the Story.txt | wc -l
2
user@user-Vostro-15-3568:~$ cat Story.txt
The United Nations list of nations doesn't include Taiwan as separate but as a part of
mber nations and two nonvoting observer states, the Vatican City and Palestine. Only 1
Taiwan as an independent nation, nine of which are in Latin America; in August 2018 E
ties with Taiwan in favor of establishing relations with China, the third country to d
year.
user@user-Vostro-15-3568:~$
```