OPERATING SYSTEMS

LAB EXERCISE

Name: Anuvind MP
Roll no: AM.EN.U4AIE22010

1.Display the path of your current directory.

```
root@anuvind:~# pwd
/root
root@anuvind:~#
```

2. Make a new directory named ***main***.

```
root@anuvind:~# mkdir main
root@anuvind:~# ls
Lab1  OS  main  snap
```

3. Now go to the directory ***main***.

```
root@anuvind:~# cd main
root@anuvind:~/main# pwd
/root/main
root@anuvind:~/main#
```

4. Make the directories in the following hierarchy using a single command.
Dir1 -> Dir 2 -> Dir3

```
root@anuvind:~/main# mkdir -p Dir1/Dir2/Dir3
root@anuvind:~/main# ls
```

5. Print the path of the current directory.

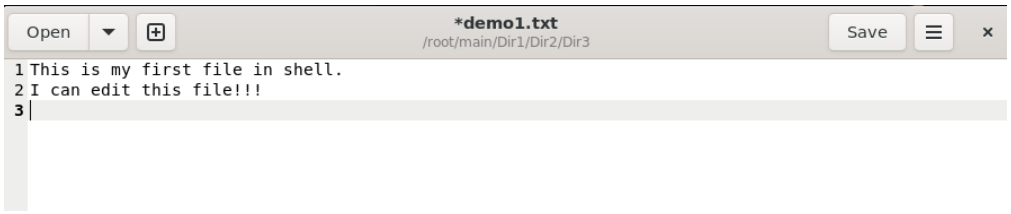
```
root@anuvind:~/main# pwd
/root/main
root@anuvind:~/main#
```

6. Go to ***Dir3*** using a single command.

```
root@anuvind:~/main# cd Dir1/Dir2/Dir3
root@anuvind:~/main/Dir1/Dir2/Dir3# pwd
/root/main/Dir1/Dir2/Dir3
```

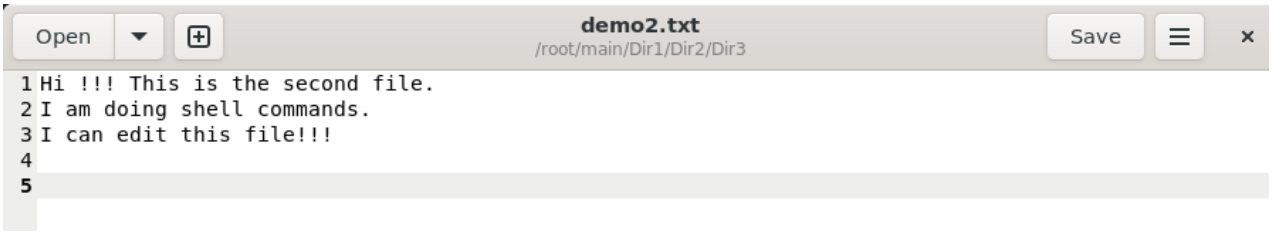
7. Create a new file ***demo1***, type and save the following contents,
This is my first file in shell.
I can edit this file!!!

```
root@anuvind:~/main/Dir1/Dir2/Dir3# gedit demo1.txt
```



8. Create a new file ***demo2***, type and save the following contents,
Hi !!! This is the second file.
I am doing shell commands.
I can edit this file!!!

```
root@anuvind:~/main/Dir1/Dir2/Dir3# gedit demo2.txt
```



9. Display the contents of file ***demo1*** in terminal.

```
root@anuvind:~/main/Dir1/Dir2/Dir3# cat demo1.txt
This is my first file in shell.
I can edit this file!!!
```

10. List the files and folders present in ***Dir3***.

```
root@anuvind:~/main/Dir1/Dir2/Dir3# ls
demo1.txt  demo2.txt
```

11. Go to ***Dir 2***.

```
root@anuvind:~/main/Dir1/Dir2/Dir3# cd ..
root@anuvind:~/main/Dir1/Dir2#
```

12. Go to your home directory.

```
root@anuvind:~/main/Dir1/Dir2# cd ~
root@anuvind:~# pwd
/root
```

13. Stay where you are, and list the contents of ***Dir3***.

```
root@anuvind:~# ls main/Dir1/Dir2/Dir3
demo1.txt  demo2.txt
```

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

```
root@anuvind:~# ls -a
.  ..  .bash_history  .bashrc  .cache  .local  .motd_shown  .profile  Lab1  OS  main  snap
root@anuvind:~#
```

15. Create a new file **test1**, type and save the contents into your file.
I am working with linux shell.
Good bye

```
root@anuvind:~# gedit test1.txt
```

16. Copy the contents of **test1** to **test2** in the same directory.

```
root@anuvind:~# touch test2.txt
root@anuvind:~# cat test1.txt > test2.txt
root@anuvind:~# cat test2.txt
I am working with linux shell.
Good bye
```

17. Rename **test2** as **test3**.

```
root@anuvind:~# mv test2.txt test3.txt
root@anuvind:~# ls
Lab1  OS  main  snap  test1.txt  test3.txt
```

18. Determine the file type of **test3**.

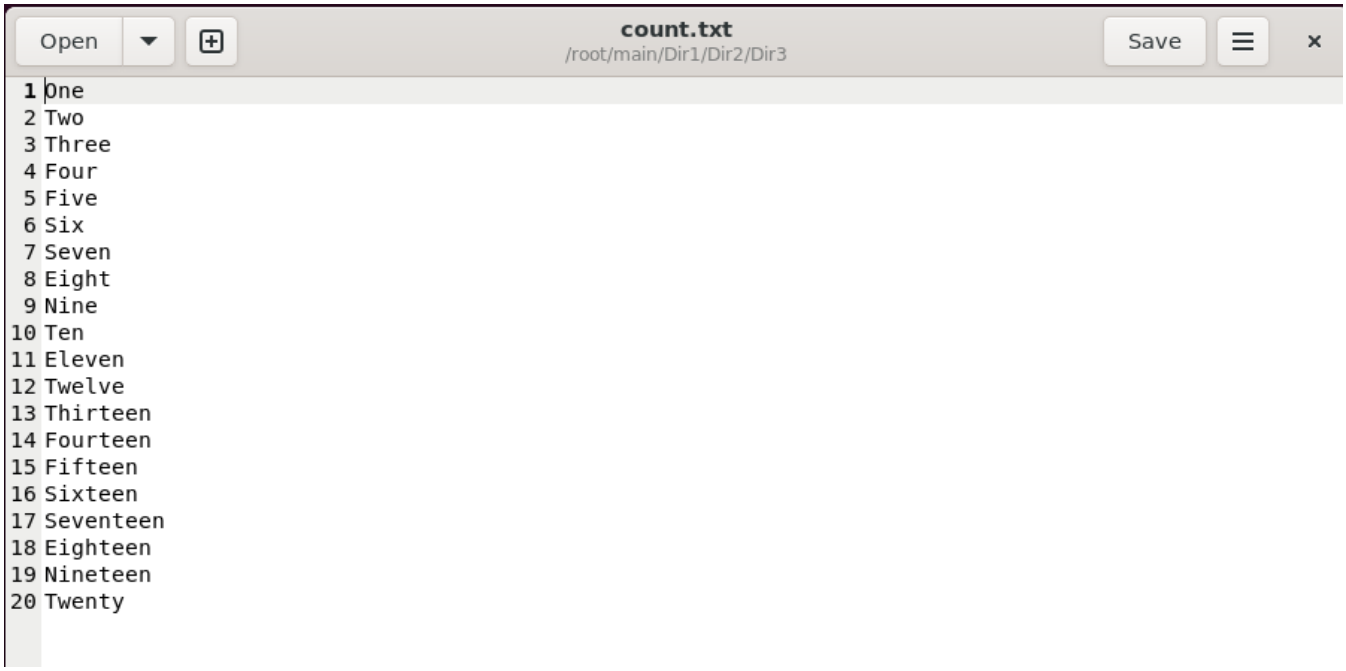
```
root@anuvind:~# file test3.txt
test3.txt: ASCII text
```

19. Move the file **test3** to the directory Dir3.

```
root@anuvind:~# mv test3.txt main/Dir1/Dir2/Dir3
root@anuvind:~/main/Dir1/Dir2/Dir3# ls
demo1.txt  demo2.txt  test3.txt
```

20. Create a file **count**, with content one to twenty in words with one line having only one number using a single command.

```
root@anuvind:~/main/Dir1/Dir2/Dir3# gedit count.txt
```



21. Copy the file **count** to **count2** using cat command.

```
root@anuvind:~/main/Dir1/Dir2/Dir3# touch count2.txt
root@anuvind:~/main/Dir1/Dir2/Dir3# cat count.txt > count2.txt
```

22. Create another file **count3** with numbers twenty one to twenty five (in fivelines).

```
root@anuvind:~/main/Dir1/Dir2/Dir3# gedit count3.txt
```

23. Concatenate the contents of files **count2** and **count3** and write it into the file **countfinal**.

```
root@anuvind:~/main/Dir1/Dir2/Dir3# cat count2.txt count3.txt > countfinal.txt
```

```
root@anuvind:~/main/Dir1/Dir2/Dir3# cat countfinal.txt
One
Two
Three
Four
Five
Six
Seven
Eight
Nine
Ten
Eleven
Twelve
Thirteen
Fourteen
Fifteen
Sixteen
Seventeen
Eighteen
Nineteen
Twenty
Twenty-one
Twenty-two
Twenty-three
Twenty-four
Twenty-five
```

24. Remove the files **demo1** and **demo2** in directory Dir3.

```
root@anuvind:~/main/Dir1/Dir2/Dir3# ls
count.txt  count2.txt  count3.txt  countfinal  countfinal.txt  demo1.txt  demo2.txt  p  test3.txt
root@anuvind:~/main/Dir1/Dir2/Dir3# rm demo1.txt demo2.txt
root@anuvind:~/main/Dir1/Dir2/Dir3# ls
count.txt  count2.txt  count3.txt  countfinal  countfinal.txt  p  test3.txt
```

25.Go to Dir2 and remove the subdirectory Dir3.

```
root@anuvind:~/main/Dir1/Dir2/Dir3# cd ..
root@anuvind:~/main/Dir1/Dir2# rm -r Dir3
root@anuvind:~/main/Dir1/Dir2#
```

26. Come back to your home folder and remove Dir2.

```
root@anuvind:~/main/Dir1/Dir2# cd
root@anuvind:~# rm -r main/Dir1/Dir2
```

27. Display first 10 lines of the file **countfinal** in terminal.

```
root@anuvind:~# head -10 countfinal.txt
One
Two
Three
Four
Five
Six
Seven
Eight
Nine
Ten
```

28. Display last 10 lines of the file **countfinal** in terminal.

```
root@anuvind:~# tail -10 countfinal.txt
Sixteen
Seventeen
Eighteen
Nineteen
Twenty
Twenty-one
Twenty-two
Twenty-three
Twenty-four
Twenty-five
root@anuvind:~#
```

29. Display first 5 lines of the file **countfinal** in terminal.

```
root@anuvind:~# head -5 countfinal.txt
One
Two
Three
Four
Five
root@anuvind:~#
```

30. Display last 4 lines of the file **countfinal** in terminal.

```
root@anuvind:~# tail -4 countfinal.txt
Twenty-two
Twenty-three
Twenty-four
Twenty-five
```

31. Display the contents of the file **countfinal** in the inverted form.(last line firstand first line last)

```
root@anuvind:~# tac countfinal.txt
Twenty-five
Twenty-four
Twenty-three
Twenty-two
Twenty-one
Twenty
Nineteen
Eighteen
Seventeen
Sixteen
Fifteen
Fourteen
Thirteen
Twelve
Eleven
Ten
Nine
Eight
Seven
Six
Five
Four
Three
Two
One
```