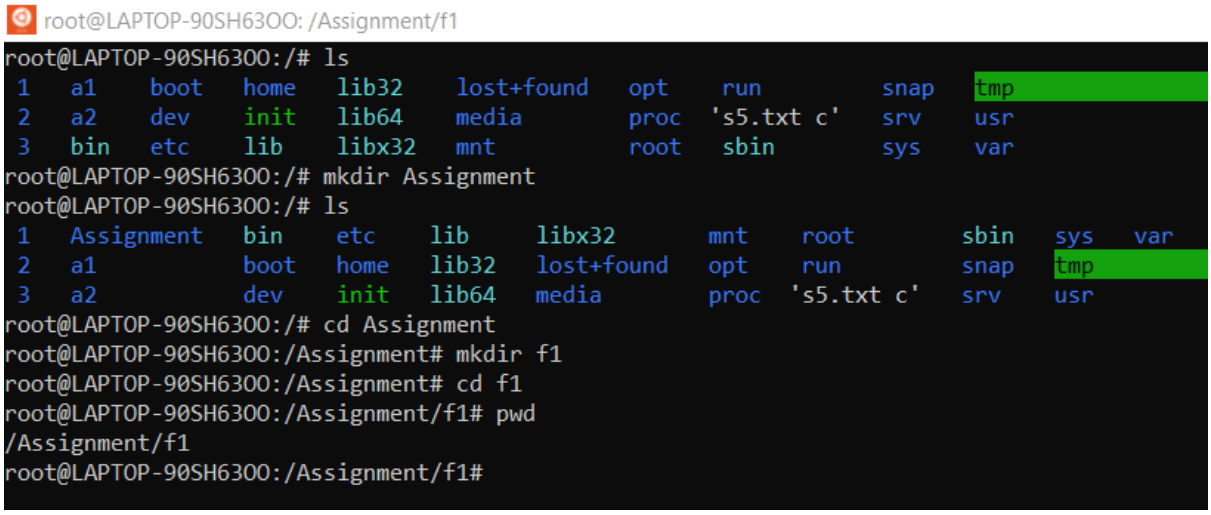
# Question-1.

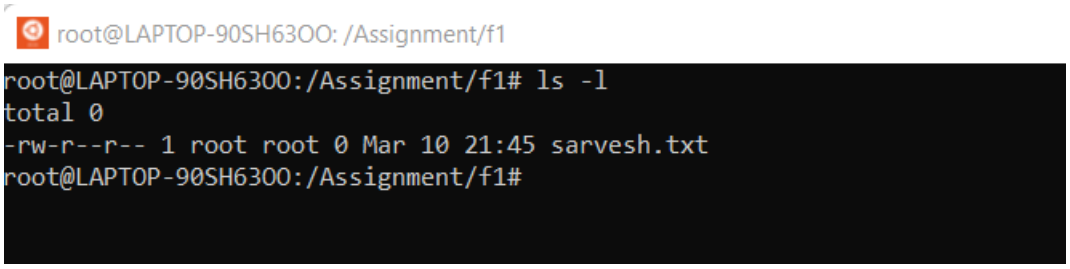
1. - use a command to show the current working directory

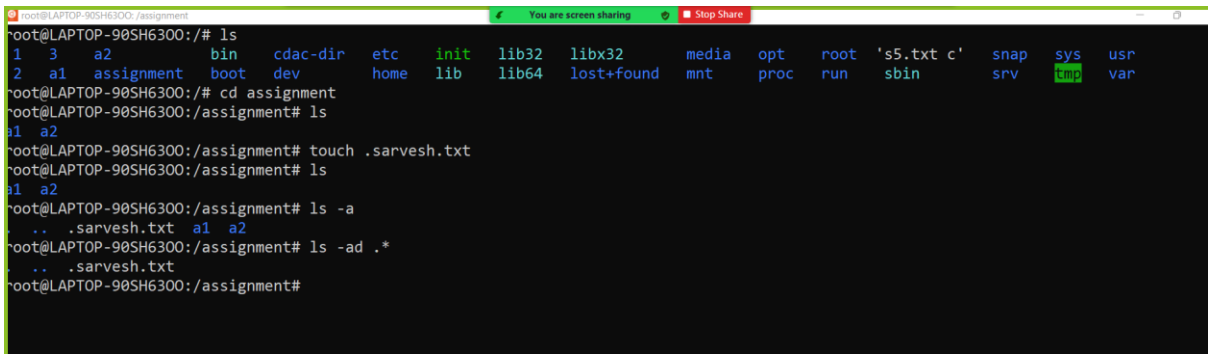
- list the directory contents in the short and long format (with file permissions,owner,size etc,.). Explore attributes given in long format e.g. file type, file permissions, file size, file owner etc.

- list all files along with hidden files in current working directory

. - list only hidden files in the directory




2. Make a directory and name it as cdac-dir and change the current working directory to the new directory.(Hint : use mkdir,cd commands).

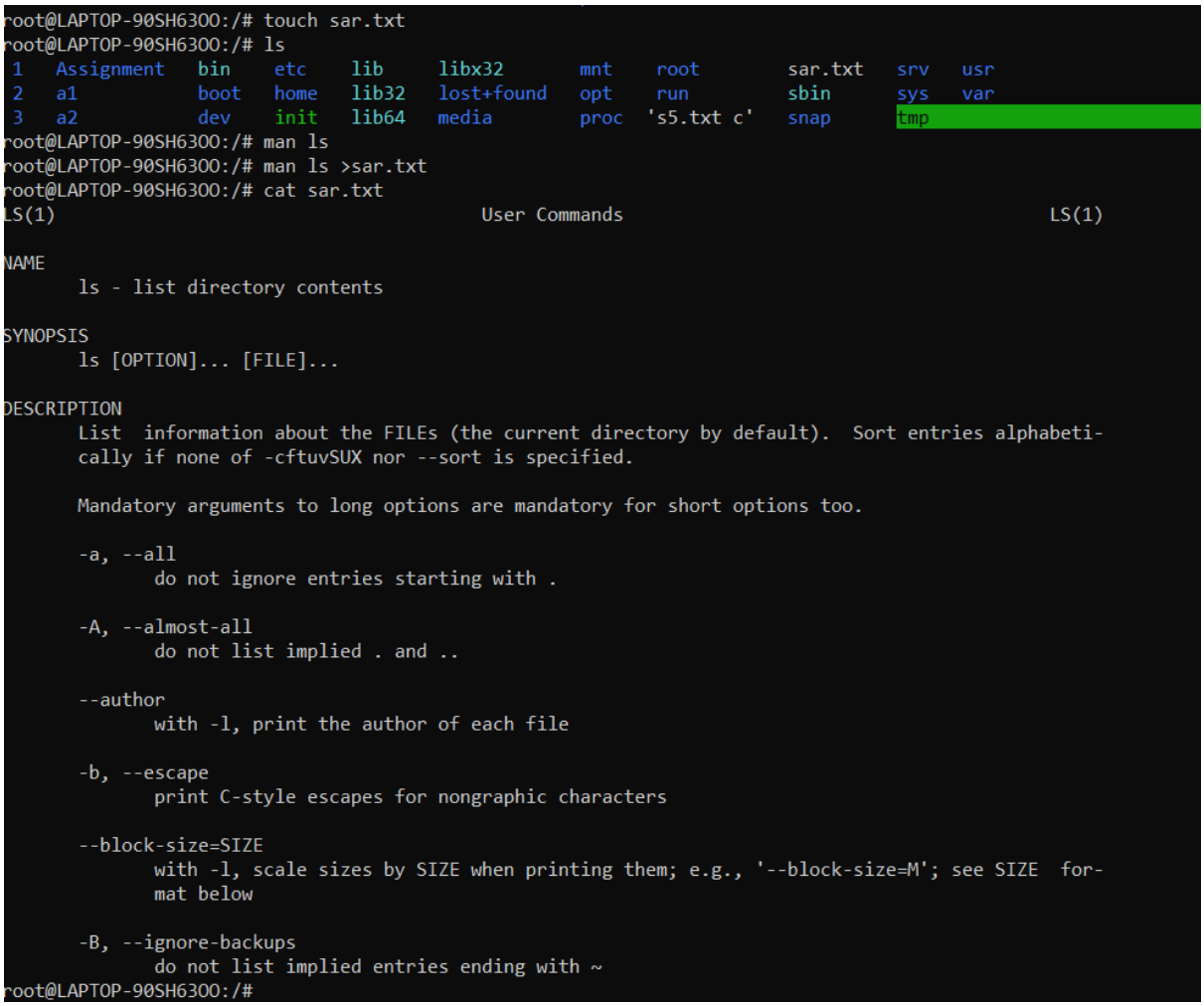
3. Create following nested directories inside current directory by invoking single command for only one time. Note : here root_dir is current directory. Directory structure 1 Directory structure 2

```
root@LAPTOP-90SH63OO:/cdac-dir# mkdir -p a1/b1
root@LAPTOP-90SH63OO:/cdac-dir# mkdir -p a1/b2
root@LAPTOP-90SH63OO:/cdac-dir# mkdir -p a2/c1
root@LAPTOP-90SH63OO:/cdac-dir# mkdir -p a2/c2
root@LAPTOP-90SH63OO:/cdac-dir# tree
.
├── a1
│   ├── b1
│   └── b2
└── a2
    ├── c1
    └── c2

6 directories, 0 files
root@LAPTOP-90SH63OO:/cdac-dir#
```

```
 directories
oot@LAPTOP-90SH63OO:/assignment# cd ..
oot@LAPTOP-90SH63OO:/# ls
1   3    a2          bin    cdac-dir   etc    init   lib32   libx32       media   opt    root  's5.txt c'   snap   sys   usr
2   a1   assignment  boot   dev        home   lib    lib64   lost+found   mnt     proc   run   sbin         srv    tmp   var
oot@LAPTOP-90SH63OO:/# cd assignment
oot@LAPTOP-90SH63OO:/assignment# ls
1  a2  cdac-dir
oot@LAPTOP-90SH63OO:/assignment# rm -rf cdac-dir
oot@LAPTOP-90SH63OO:/assignment# tree -d

── a1
   └── b1
       └── c1
── a2
   └── b2
       └── c2
```

# Question-2.

1. Display the man-page for ls, but redirect the output into temp.txt, then use the cat, less, and more commands to display the new file.



2. Display the initial 10 lines and final 5 lines of temp.txt with the obvious Linux commands.(Hint: use head and tail commands).

```
GNU coreutils 8.30                              September 2019
root@LAPTOP-90SH63OO:/# touch temp.txt
root@LAPTOP-90SH63OO:/# cat > temp.txt
Hii
Hello
Good Night
Good Morning
Good Afternoon
Go
Bye
Getout
abc
hjkkk
llll
ooo
pppap
mother
father
cat
matroot@LAPTOP-90SH63OO:/# temp -n 10 temp.txt
temp: command not found
root@LAPTOP-90SH63OO:/# head -n 10 temp.txt
Hii
Hello
Good Night
Good Morning
Good Afternoon
Go
Bye
Getout
abc
hjkkk
root@LAPTOP-90SH63OO:/# tail -n 10 temp.txt
Getout
abc
hjkkk
llll
ooo
pppap
mother
father
cat
matroot@LAPTOP-90SH63OO:/#
```

3. Copy temp.txt to another directory and rename it there. (Hint: use cp to copy and mv command to rename).

```
matroot@LAPTOP-90SH63OO:/# cd ..
root@LAPTOP-90SH63OO:/# ls
 1   Assignment   bin    etc    lib     libx32       mnt    root        sar.txt   srv        tmp
 2   a1           boot   home   lib32   lost+found   opt    run         sbin      sys        usr
 3   a2           dev    init   lib64   media        proc   's5.txt c'  snap      temp.txt   var
root@LAPTOP-90SH63OO:/# cp temp.txt Assignment
root@LAPTOP-90SH63OO:/# cd Assignment
root@LAPTOP-90SH63OO:/Assignment# ls
f1  temp.txt
root@LAPTOP-90SH63OO:/Assignment# mv temp.txt pratik.txt
root@LAPTOP-90SH63OO:/Assignment# ls
f1  pratik.txt
root@LAPTOP-90SH63OO:/Assignment#
```

4. Display the number of lines, words and characters in file using Linux command (Hint: use wc command).

```
matroot@LAPTOP-90SH63OO:/# cd ..
root@LAPTOP-90SH63OO:/# ls
 1   Assignment   bin    etc    lib     libx32       mnt    root        sar.txt   srv        tmp
 2   a1           boot   home   lib32   lost+found   opt    run         sbin      sys        usr
 3   a2           dev    init   lib64   media        proc   's5.txt c'  snap      temp.txt   var
root@LAPTOP-90SH63OO:/# cp temp.txt Assignment
root@LAPTOP-90SH63OO:/# cd Assignment
root@LAPTOP-90SH63OO:/Assignment# ls
f1  temp.txt
root@LAPTOP-90SH63OO:/Assignment# mv temp.txt pratik.txt
root@LAPTOP-90SH63OO:/Assignment# ls
f1  pratik.txt
root@LAPTOP-90SH63OO:/Assignment# wc pratik.txt
 16  20 109 pratik.txt
root@LAPTOP-90SH63OO:/Assignment# wc -m  pratik.txt
109 pratik.txt
root@LAPTOP-90SH63OO:/Assignment# wc -l -w  pratik.txt
 16  20 pratik.txt
root@LAPTOP-90SH63OO:/Assignment#
```

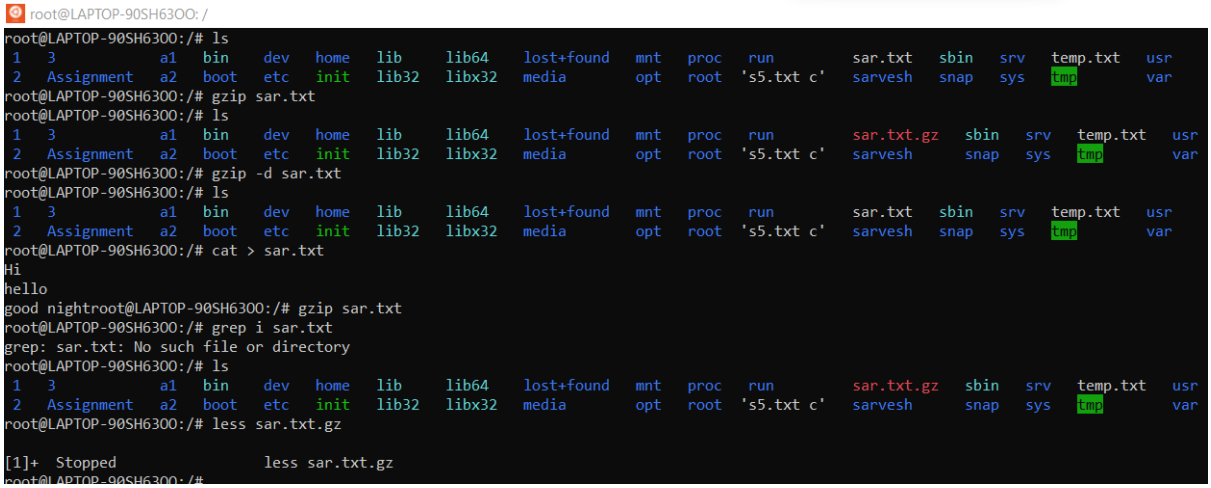
5. Use history command to display last 10 commands used.

```
root@LAPTOP-90SH63OO:/Assignment# history | head
    1  mkdir sarvesh
    2  ls
    3  rmdir sarvesh
    4  ls
    5  ncal
    6  date
    7  mount proc
    8  df -h
    9  sbin
   10  /sbin
root@LAPTOP-90SH63OO:/Assignment#
```

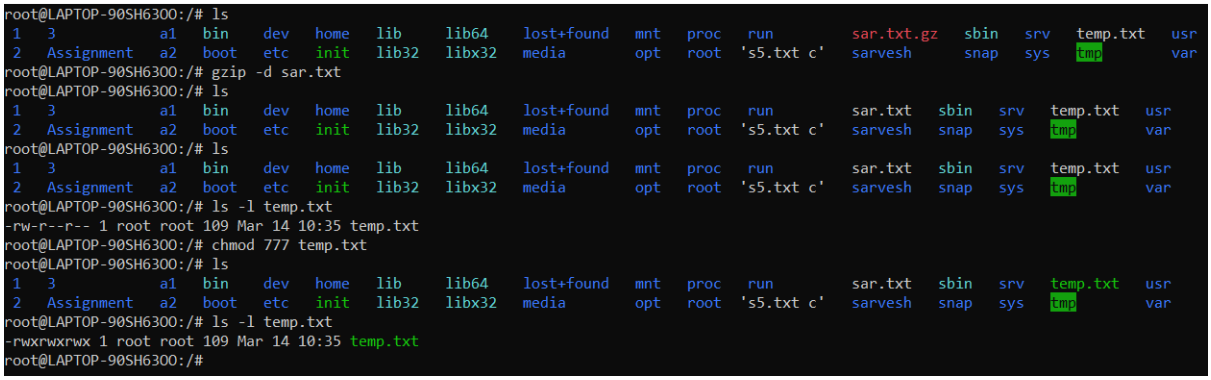
# Question-3.

1. Create tar archive file of any directory present in your home directory. (Hint: use tar command) - list the contents of the archive file without extracting.

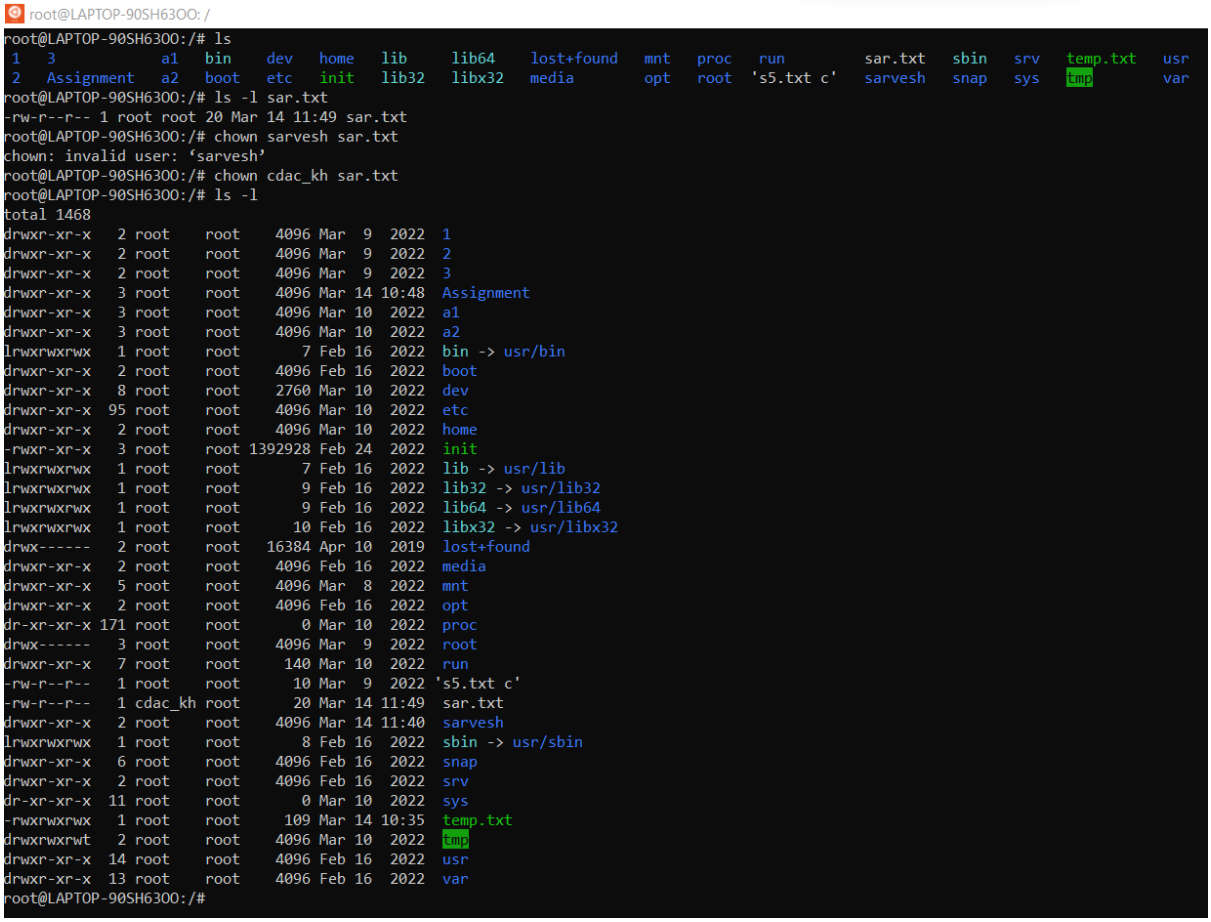
2. Create zip file of another directory. (Hint: use zip command) - list the contents of the zip file without extracting.




3. Give read, write & execute permissions to your file. (Hint: use chmod command)



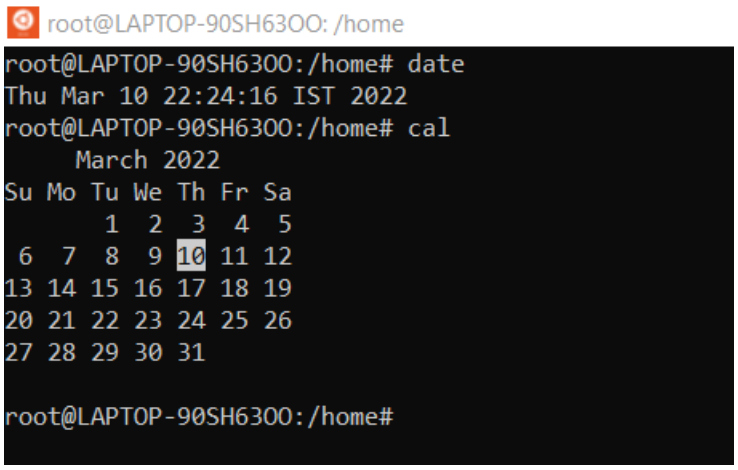
4. Change ownership of that file.(Hint: use chown command)



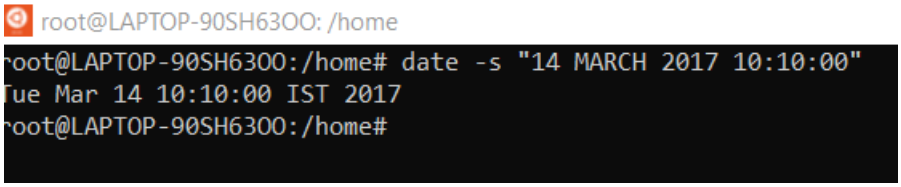

5. List processes running in shell, all running processes(Hint: use man page of ps command) and show top processes in decreasing order of their resource utilization.(Hint: use top command).

# Question-4.

1. Display current time and calendar (Hint: use date, cal commands)




2. Change the current date and time of the system to following 14th March 2017, 10:10 AM




3. Explore following commands who, whoami, whatis, whereis