**Problem1:**

**a)**

arusa@LAPTOP-HG95PF2G:~$ cd /

arusa@LAPTOP-HG95PF2G:/$ pwd

/

arusa@LAPTOP-HG95PF2G:/$ ls

bin dev home lib lib64 media opt root sbin srv tmp var

boot etc init lib32 libx32 mnt proc run snap sys usr

arusa@LAPTOP-HG95PF2G:/$ cd home

arusa@LAPTOP-HG95PF2G:/home$ ls

arusa

arusa@LAPTOP-HG95PF2G:/home$ mkdir LinuxAssignment

mkdir: cannot create directory ‘LinuxAssignment’: Permission denied

arusa@LAPTOP-HG95PF2G:/home$ sudo su

[sudo] password for arusa:

root@LAPTOP-HG95PF2G:/home# ls

arusa

root@LAPTOP-HG95PF2G:/home# mkdir LinuxAssignment

root@LAPTOP-HG95PF2G:/home# ls

LinuxAssignment arusa

root@LAPTOP-HG95PF2G:/home# cd LinuxAssignment/  
  
  
  
  
  
**b)** root@LAPTOP-HG95PF2G:/home/LinuxAssignment# touch file1.txt

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# cat file1.txt

**c)**

root@LAPTOP-HG95PF2G:/home# cd LinuxAssignment/

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# mkdir docs

**d)** root@LAPTOP-HG95PF2G:/home/LinuxAssignment# cp file1.txt docs

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# cd docs

root@LAPTOP-HG95PF2G:/home/LinuxAssignment/docs# ls

file1.txt

root@LAPTOP-HG95PF2G:/home/LinuxAssignment/docs# mv file1.txt file2.txt

root@LAPTOP-HG95PF2G:/home/LinuxAssignment/docs# ls

file2.txt

**e)** root@LAPTOP-HG95PF2G:/home/LinuxAssignment/docs# chmod 704 file2.txt

root@LAPTOP-HG95PF2G:/home/LinuxAssignment/docs# ls -l

total 0

-rwx---r-- 1 root root 0 Mar 7 17:56 file2.txt

root@LAPTOP-HG95PF2G:/home/LinuxAssignment/docs# chown arusa file2.txt

root@LAPTOP-HG95PF2G:/home/LinuxAssignment/docs# ls -l

total 0

-rwx---r-- 1 arusa root 0 Mar 7 17:56 file2.txt

**f)**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment/docs# cd /

root@LAPTOP-HG95PF2G:/# ls

bin dev home lib lib64 media opt root sbin srv tmp var

boot etc init lib32 libx32 mnt proc run snap sys usr

root@LAPTOP-HG95PF2G:/# cd home/

root@LAPTOP-HG95PF2G:/home# cd LinuxAssignment/

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# ls

docs file1.txt

**g)a.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# find . -name "\*.txt"

./docs/file2.txt

./file1.txt

**g)b.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# cat file1.txt

apple

mango

cherry

apple

my fav fruit is apple

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# grep apple file1.txt

apple

apple

my fav fruit is apple

root@LAPTOP-HG95PF2G:/home/LinuxAssignment#

**h)**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# date

Thu Mar 7 18:40:02 IST 2024

**i)a.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# hostname -I

192.168.10.13

**i)b.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# ping 192.168.10.13

PING 192.168.10.13 (192.168.10.13) 56(84) bytes of data.

64 bytes from 192.168.10.13: icmp\_seq=1 ttl=128 time=0.251 ms

64 bytes from 192.168.10.13: icmp\_seq=2 ttl=128 time=0.468 ms

64 bytes from 192.168.10.13: icmp\_seq=3 ttl=128 time=0.249 ms

**j)a.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# tar -cvf docs.tar docs

docs/

docs/file2.txt

**j)b.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# tar -xvf docs.tar -C /home/LinuxAssignment/extracted/

docs/

docs/file2.txt

**k)a.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# vi file1.txt

**k)b.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# sed -i 's/arusa/ARUSA/g' file1.txt

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# cat file1.txt

hello ARUSA

ARUSA

**Problem2.**

**a.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# head -10 data.txt

1

2

3

4

5

6

7

8

9

10

**b.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# tail -5 data.txt

11

12

13

14

15

**c.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# head -15 numbers.txt

**d.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# tail -3 numbers.txt

**e.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# cat file1.txt

hello ARUSA

ARUSA

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# sed 's/[a-z]/\U&/g' file1.txt > filenew.txt

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# cat filenew.txt

HELLO ARUSA

ARUSA

root@LAPTOP-HG95PF2G:/home/LinuxAssignment#

**f.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# cat filenew.txt

HELLO ARUSA

ARUSA

ARUSA

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# uniq filenew.txt

HELLO ARUSA

ARUSA

**g.**

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# cat fruit.txt

apple

apple

mango

mango

pineapple

root@LAPTOP-HG95PF2G:/home/LinuxAssignment# uniq -c fruit.txt

2 apple

2 mango

1 pineapple

root@LAPTOP-HG95PF2G:/home/LinuxAssignment#