**COS Assignment 1**

**a)Navigate and List:**

SAURABH WALANJ@DESKTOP-4L7S89R ~

$ cd ~

SAURABH WALANJ@DESKTOP-4L7S89R ~

$ ls

CDAC Demo Demo2 Project1

SAURABH WALANJ@DESKTOP-4L7S89R ~

$ mkdir LinuxAssignment

**b) File Management:**

SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ cat >> file1.txt

hello this is file 1

**c) Directory Management:**

SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ mkdir docs

**d) Copy and Move Files:**

SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ cp file1.txt docs/file2.txt

**e) Permissions and Ownership:**

SAURABHWALANJ@DESKTOP-4L7S89R ~/LinuxAssignment/docs

$ chmod 774 file2.txt

SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment/docs

$ ls -l

total 1

-rwxrwxr-- 1 SAURABH WALANJ None 22 Aug 20 23:30 file2.txt

**f) Final Checklist:**

$ ls -l LinuxAssignment

total 1

drwxr-xr-x 1 SAURABH WALANJ None 0 Aug 20 23:30 docs

-rw-r--r-- 1 SAURABH WALANJ None 22 Aug 20 23:12 file1.txt

SAURABH WALANJ@DESKTOP-4L7S89R ~

$ ls -l /

**g) File Searching:**

SAURABH WALANJ@DESKTOP-4L7S89R ~

$ find -name "\*.txt"

./CDAC/file1.txt

./CDAC/file2.txt

./CDAC/file3.txt

./CDAC/file4.txt

./CDAC/file6.txt

./CDAC/test.txt

./Demo/test.txt

./LinuxAssignment/docs/file2.txt

./LinuxAssignment/file1.txt

SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ grep "this" file1.txt

hello this is file 1

this is edit of this file

**h) System Information:**

SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ date

Wed Aug 19 23:38:21 IST 2025

**i)Networking:**

$ hostname -I

192.168.56.1 169.254.41.129 169.254.154.72 192.168.0.103 169.254.165.220

$ ping google.com

Pinging google.com [142.250.70.46] with 32 bytes of data:

Reply from 142.250.70.46: bytes=32 time=7ms TTL=119

Reply from 142.250.70.46: bytes=32 time=6ms TTL=119

Reply from 142.250.70.46: bytes=32 time=6ms TTL=119

Reply from 142.250.70.46: bytes=32 time=6ms TTL=119

Ping statistics for 142.250.70.46:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 6ms, Maximum = 7ms, Average = 6ms

**j) File Compression:**

SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ zip New.zip LinuxAssignment/docs

**k) File Editing:**

SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ vi file1.txt

SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ sed -i "s/Banana/Mango/g" file2.txt

**Problem 2:**

1. SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ head data.txt

1. SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ tail data.txt

1. SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ head -15 numbers.txt

1. SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ tail -3 numbers.txt

1. SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ tr 'a-z' 'A-Z' < data.txt > output.txt

1. SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ sort data.txt | uniq

1. SAURABH WALANJ@DESKTOP-4L7S89R ~/LinuxAssignment

$ sort data.txt | uniq -c

1 Almonds

1 Apple

1 Apple

1 Banana

1 Banana

1 Fig

1 Fig

1 Jackfruit

1 Mango

2 Orange

1 Watermelon