

Problem 1: Assignment os 1

Monday, March 3, 2025 1:07 AM

a) Navigate and List:

a. Start by navigating to your home directory and list its contents. Then, move into a directory named "LinuxAssignment" if it exists; otherwise, create it.

Ans:-

```
cdac@DESKTOP-4UCUGOV:~$ pwd
cdac@DESKTOP-4UCUGOV:~$ cd ~
cdac@DESKTOP-4UCUGOV:~$ ls
Feb25
cdac@DESKTOP-4UCUGOV:~$ mkdir -p LinuxAssignment
cdac@DESKTOP-4UCUGOV:~$ cd LinuxAssignment
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$
```

```
cdac@DESKTOP-4UCUGOV:~$ pwd
/home/cdac
cdac@DESKTOP-4UCUGOV:~$ cd
cdac@DESKTOP-4UCUGOV:~$ ls
CPP Feb25
cdac@DESKTOP-4UCUGOV:~$ mkdir LinuxAssignment
cdac@DESKTOP-4UCUGOV:~$ ls
CPP Feb25 LinuxAssignment
cdac@DESKTOP-4UCUGOV:~$ cd LinuxAssignment
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$
```

b)File Management:

a. Inside the "LinuxAssignment" directory, create a new file named "file1.txt". Display its contents.

```
cdac@DESKTOP-4UCUGOV:~$ cd LinuxAssignment
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ touch file1.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls
file1.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l
total 0
-rw-r--r-- 1 cdac cdac 0 Feb 27 13:39 file1.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls file1.txt
file1.txt
```

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ nano file1.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cat file1.txt
Hi Nitish
```

```
cdac@DESKTOP-4UCUGOV:~$ cd LinuxAssignment
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ touch file1.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls
file1.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l
total 0
-rw-r--r-- 1 cdac cdac 0 Feb 27 13:39 file1.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls file1.txt
file1.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ nano file1.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cat file1.txt
Hi Nitish
```

Directory Management:

a. Create a new directory named "docs" inside the "LinuxAssignment" directory.

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cd
cdac@DESKTOP-4UCUGOV:~$ cd LinuxAssignment
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ mkdir docs
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls
docs
```

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cd
cdac@DESKTOP-4UCUGOV:~$ cd LinuxAssignment
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ mkdir docs
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls
docs
```

Copy and Move Files:

a. Copy the "file1.txt" file into the "docs" directory and rename it to "file2.txt".

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ mv file1.txt file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls
docs file2.txt
```

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ mv file1.txt file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls
docs file2.txt
```

Permissions and Ownership:

a. Change the permissions of "file2.txt" to allow read, write, and execute permissions for the owner and only read permissions for others. Then, change the owner of "file2.txt" to the current user.

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chmod 744 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chown $(whoami) file.txt
chown: cannot access 'file.txt': No such file or directory
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ mkdir file.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chown $(whoami) file.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l file2.txt
-rwxr--r-- 1 cdac cdac 12 Feb 27 13:54 file2.txt
```

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chmod 744 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chown $(whoami) file.txt
chown: cannot access 'file.txt': No such file or directory
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ mkdir file.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chown $(whoami) file.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l file2.txt
-rwxr--r-- 1 cdac cdac 12 Feb 27 13:54 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chown $(whoami) file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chown $USER file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chown u+rwx,o+r file2.txt
chown: invalid user: 'u+rwx,o+r'
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chown u=rwx g=r o=x file2.txt
chown: invalid user: 'u=rwx'
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l file2.txt
-rwxr--r-- 1 cdac cdac 12 Feb 27 13:54 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chmod u=rwx g=r o=x
chmod: cannot access 'g=r': No such file or directory
chmod: cannot access 'o=x': No such file or directory
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chmod u=rwx g=r o=x file2.txt
chmod: cannot access 'g=r': No such file or directory
chmod: cannot access 'o=x': No such file or directory
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chmod u=rwx file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chmod g=r file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chmod o=x file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ nano file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chown $USER file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ nano file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ chmod o=r file2.txt
```

Final Checklist:

a. Finally, list the contents of the "LinuxAssignment" directory and the root directory to ensure that all operations were performed correctly.

```
cdac@DESKTOP-4UCUGOV:~$ cd LinuxAssignment
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l
total 0
drwxr-xr-x 1 cdac cdac 512 Feb 27 15:09 docs
drwxr-xr-x 1 cdac cdac 512 Feb 27 17:05 file.txt
-rwxr--r-- 1 cdac cdac 12 Feb 27 17:27 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ sudo ls -l
total 0
drwxr-xr-x 1 cdac cdac 512 Feb 27 15:09 docs
drwxr-xr-x 1 cdac cdac 512 Feb 27 17:05 file.txt
-rwxr--r-- 1 cdac cdac 12 Feb 27 17:27 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l
total 0
drwxr-xr-x 1 cdac cdac 512 Feb 27 15:09 docs
drwxr-xr-x 1 cdac cdac 512 Feb 27 17:05 file.txt
-rwxr--r-- 1 cdac cdac 12 Feb 27 17:27 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l docs
total 0
-rw-r--r-- 1 cdac cdac 12 Feb 27 15:09 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l /
total 632
lrwxrwxrwx 1 root root    7 Apr 22  2024 bin -> usr/bin
drwxr-xr-x 1 root root 512 Feb 26  2024 bin.usr-is-merged
drwxr-xr-x 1 root root 512 Apr 22  2024 boot
drwxr-xr-x 1 root root 512 Mar  2 17:46 dev
drwxr-xr-x 1 root root 512 Mar  2 17:46 etc
drwxr-xr-x 1 root root 512 Feb 24 17:43 home
-rwxr-xr-x 1 root root 644432 Sep  2  2023 init
lrwxrwxrwx 1 root root    7 Apr 22  2024 lib -> usr/lib
drwxr-xr-x 1 root root 512 Apr  8  2024 lib.usr-is-merged
lrwxrwxrwx 1 root root    9 Apr 22  2024 lib64 -> usr/lib64
drwxr-xr-x 1 root root 512 Jan  6 20:13 media
drwxr-xr-x 1 root root 512 Feb 24 17:42 mnt
drwxr-xr-x 1 root root 512 Jan  6 20:13 opt
dr-xr-xr-x 9 root root    0 Mar  2 17:46 proc
drwx----- 1 root root 512 Jan  6 20:15 root
drwxr-xr-x 1 root root 512 Mar  2 17:51 run
lrwxrwxrwx 1 root root    8 Apr 22  2024/sbin -> usr/sbin
drwxr-xr-x 1 root root 512 Mar 31  2024/sbin.usr-is-merged
drwxr-xr-x 1 root root 512 Oct 11 08:05 snap
drwxr-xr-x 1 root root 512 Jan  6 20:13 srv
dr-xr-xr-x 12 root root    0 Mar  2 17:46 sys
drwxrwxrwt 1 root root 512 Feb 26 11:03 tmp
drwxr-xr-x 1 root root 512 Jan  6 20:13 usr
```

drwxr-xr-x 1 root root 512 Jan 6 20:15 var



```

cdac@DESKTOP-4UCUGOV:~$ cd LinuxAssignment
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l
total 0
drwxr-xr-x 1 cdac cdac 512 Feb 27 15:09 docs
drwxr-xr-x 1 cdac cdac 512 Feb 27 17:05 file.txt
-rwxr--r-- 1 cdac cdac 12 Feb 27 17:27 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ sudo ls -l
total 0
drwxr-xr-x 1 cdac cdac 512 Feb 27 15:09 docs
drwxr-xr-x 1 cdac cdac 512 Feb 27 17:05 file.txt
-rwxr--r-- 1 cdac cdac 12 Feb 27 17:27 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l
total 0
drwxr-xr-x 1 cdac cdac 512 Feb 27 15:09 docs
drwxr-xr-x 1 cdac cdac 512 Feb 27 17:05 file.txt
-rwxr--r-- 1 cdac cdac 12 Feb 27 17:27 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l docs
total 0
-rw-r--r-- 1 cdac cdac 12 Feb 27 15:09 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l /
total 632
lrwxrwxrwx 1 root root 7 Apr 22 2024 bin -> usr/bin
drwxr-xr-x 1 root root 512 Feb 26 2024 bin.usr-is-merged
drwxr-xr-x 1 root root 512 Apr 22 2024 boot
drwxr-xr-x 1 root root 512 Mar 2 17:46 dev
drwxr-xr-x 1 root root 512 Mar 2 17:46 etc
drwxr-xr-x 1 root root 512 Feb 24 17:43 home
-rwxr-xr-x 1 root root 644432 Sep 2 2023 init
lrwxrwxrwx 1 root root 7 Apr 22 2024 lib -> usr/lib
drwxr-xr-x 1 root root 512 Apr 8 2024 lib.usr-is-merged
lrwxrwxrwx 1 root root 9 Apr 22 2024 lib64 -> usr/lib64
drwxr-xr-x 1 root root 512 Jan 6 20:13 media
drwxr-xr-x 1 root root 512 Feb 24 17:42 mnt
drwxr-xr-x 1 root root 512 Jan 6 20:13 opt
dr-xr-xr-x 9 root root 0 Mar 2 17:46 proc
drwx----- 1 root root 512 Jan 6 20:15 root
drwxr-xr-x 1 root root 512 Mar 2 17:51 run
lrwxrwxrwx 1 root root 8 Apr 22 2024 sbin -> usr/sbin
drwxr-xr-x 1 root root 512 Mar 31 2024 sbin.usr-is-merged
drwxr-xr-x 1 root root 512 Oct 11 08:05 snap
drwxr-xr-x 1 root root 512 Jan 6 20:13 srv
dr-xr-xr-x 12 root root 0 Mar 2 17:46 sys
drwxrwxrwt 1 root root 512 Feb 26 11:03 tmp
drwxr-xr-x 1 root root 512 Jan 6 20:13 usr
drwxr-xr-x 1 root root 512 Jan 6 20:15 var

```

g) File Searching:

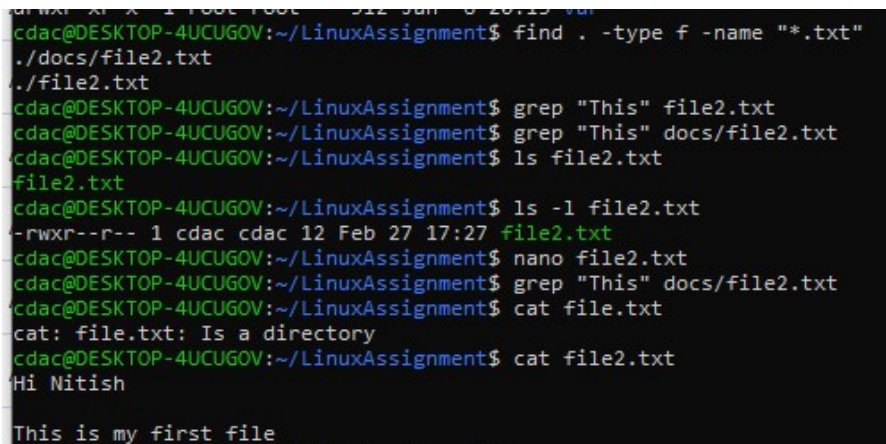
- Search for all files with the extension ".txt" in the current directory and its subdirectories.
- Display lines containing a specific word in a file (provide a file name and the specific word to search).


```

cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ find . -type f -name "*.txt"
./docs/file2.txt
./file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ grep "This" file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ grep "This" docs/file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls file2.txt
file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l file2.txt
-rwxr--r-- 1 cdac cdac 12 Feb 27 17:27 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ nano file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ grep "This" docs/file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cat file.txt
cat: file.txt: Is a directory
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cat file2.txt
Hi Nitish

```

This is my first file



```

cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ find . -type f -name "*.txt"
./docs/file2.txt
./file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ grep "This" file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ grep "This" docs/file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls file2.txt
file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l file2.txt
-rwxr--r-- 1 cdac cdac 12 Feb 27 17:27 file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ nano file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ grep "This" docs/file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cat file.txt
cat: file.txt: Is a directory
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cat file2.txt
Hi Nitish
This is my first file

```

h) System Information:

a. Display the current system date and time.

```

cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ date
Sun Mar 2 18:12:10 UTC 2025

```

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ date
Sun Mar  2 18:12:10 UTC 2025
```

i) Networking:

a. Display the IP address of the system. b. Ping a remote server to check connectivity (provide a remote server address to ping).

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ip a
17: eth0: <> mtu 1500 group default qlen 1
    link/ether e8:6a:64:0e:53:9f
    inet 169.254.142.18/16 brd 169.254.255.255 scope global dynamic
        valid_lft forever preferred_lft forever
    inet6 fe80::771c:6efd:b2fb:31ef/64 scope link dynamic
        valid_lft forever preferred_lft forever
5: eth1: <> mtu 1500 group default qlen 1
    link/ether 00:f4:8d:bf:23:6c
    inet 169.254.25.102/16 brd 169.254.255.255 scope global dynamic
        valid_lft forever preferred_lft forever
    inet6 fe80::c760:1cb8:6513:6de6/64 scope link dynamic
        valid_lft forever preferred_lft forever
1: lo: <LOOPBACK,UP> mtu 1500 group default qlen 1
    link/loopback 00:00:00:00:00:00
    inet 127.0.0.1/8 brd 127.255.255.255 scope global dynamic
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host dynamic
        valid_lft forever preferred_lft forever
13: wifi0: <BROADCAST,MULTICAST,UP> mtu 1500 group default qlen 1
    link/ieee802.11 00:f4:8d:bf:23:6b
    inet 192.168.10.206/24 brd 192.168.10.255 scope global dynamic
        valid_lft 3351sec preferred_lft 3351sec
    inet6 2409:4081:e39:4b38:2a5b:dd24:97ed:a43e/64 scope global
dynamic
        valid_lft 6853sec preferred_lft 6853sec
    inet6 2409:4081:e39:4b38:41b9:d963:333e:cbb6/128 scope global
dynamic
        valid_lft 6853sec preferred_lft 6853sec
    inet6 fe80::2e13:a0c9:352d:790a/64 scope link dynamic
        valid_lft forever preferred_lft forever
12: wifi1: <> mtu 1500 group default qlen 1
    link/ieee802.11 02:f4:8d:a7:53:29
    inet 169.254.162.171/16 brd 169.254.255.255 scope global dynamic
        valid_lft forever preferred_lft forever
    inet6 fe80::c1ea:6bcc:2984:e3f1/64 scope link dynamic
        valid_lft forever preferred_lft forever
10: wifi2: <> mtu 1500 group default qlen 1
    link/ieee802.11 82:f4:8d:84:42:21
    inet 169.254.185.60/16 brd 169.254.255.255 scope global dynamic
        valid_lft forever preferred_lft forever
    inet6 fe80::b6b0:914d:28d0:c9b/64 scope link dynamic
        valid_lft forever preferred_lft forever
```



```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ping -c 4 google.com
PING google.com (2404:6800:4009:82e::200e) 56 data bytes
64 bytes from bom07s37-in-x0e.1e100.net (2404:6800:4009:82e::200e):
icmp_seq=1 ttl=57 time=1007 ms
64 bytes from bom07s37-in-x0e.1e100.net (2404:6800:4009:82e::200e):
icmp_seq=2 ttl=57 time=132 ms
64 bytes from bom07s37-in-x0e.1e100.net (2404:6800:4009:82e::200e):
icmp_seq=3 ttl=57 time=90.7 ms
64 bytes from bom07s37-in-x0e.1e100.net (2404:6800:4009:82e::200e):
icmp_seq=4 ttl=57 time=78.2 ms
```

--- google.com ping statistics ---

4 packets transmitted, 4 received, 0% packet loss, time 3011ms
rtt min/avg/max/mdev = 78.169/327.056/1007.016/393.086 ms, pipe 2

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ip a
17: eth0: <> mtu 1500 group default qlen 1
    link/ether e8:6a:64:0e:53:9f
    inet 169.254.142.18/16 brd 169.254.255.255 scope global dynamic
        valid_lft forever preferred_lft forever
    inet6 fe80::771c:6efd:b2fb:31ef/64 scope link dynamic
        valid_lft forever preferred_lft forever
5: eth1: <> mtu 1500 group default qlen 1
    link/ether 00:f4:8d:bf:23:6c
    inet 169.254.25.102/16 brd 169.254.255.255 scope global dynamic
        valid_lft forever preferred_lft forever
    inet6 fe80::c760:1cb8:6513:6de6/64 scope link dynamic
        valid_lft forever preferred_lft forever
1: lo: <LOOPBACK,UP> mtu 1500 group default qlen 1
    link/loopback 00:00:00:00:00:00
    inet 127.0.0.1/8 brd 127.255.255.255 scope global dynamic
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host dynamic
        valid_lft forever preferred_lft forever
13: wlan0: <BROADCAST,MULTICAST,UP> mtu 1500 group default qlen 1
    link/ieee802.11 00:f4:8d:bf:23:6b
    inet 192.168.10.206/24 brd 192.168.10.255 scope global dynamic
        valid_lft 3351sec preferred_lft 3351sec
    inet6 2409:4081:e39:4b38:2a5b:dd24:97ed:a43e/64 scope global dynamic
        valid_lft 6853sec preferred_lft 6853sec
    inet6 2409:4081:e39:4b38:41b9:d963:333e:cbb6/128 scope global dynamic
        valid_lft 6853sec preferred_lft 6853sec
    inet6 fe80::2e13:a0c9:352d:790a/64 scope link dynamic
        valid_lft forever preferred_lft forever
12: wlan1: <> mtu 1500 group default qlen 1
    link/ieee802.11 02:f4:8d:a7:53:29
    inet 169.254.162.171/16 brd 169.254.255.255 scope global dynamic
        valid_lft forever preferred_lft forever
    inet6 fe80::c1ea:6bcc:2984:e3f1/64 scope link dynamic
        valid_lft forever preferred_lft forever
10: wlan2: <> mtu 1500 group default qlen 1
    link/ieee802.11 82:f4:8d:84:42:21
    inet 169.254.185.60/16 brd 169.254.255.255 scope global dynamic
        valid_lft forever preferred_lft forever
    inet6 fe80::b6b0:914d:28d0:c9b/64 scope link dynamic
        valid_lft forever preferred_lft forever
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ping -c 4 google.com
PING google.com (2404:6800:4009:82e::200e) 56 data bytes
64 bytes from bom07s37-in-x0e.1e100.net (2404:6800:4009:82e::200e): icmp_seq=1 ttl=57 time=1007 ms
64 bytes from bom07s37-in-x0e.1e100.net (2404:6800:4009:82e::200e): icmp_seq=2 ttl=57 time=132 ms
64 bytes from bom07s37-in-x0e.1e100.net (2404:6800:4009:82e::200e): icmp_seq=3 ttl=57 time=90.7 ms
64 bytes from bom07s37-in-x0e.1e100.net (2404:6800:4009:82e::200e): icmp_seq=4 ttl=57 time=78.2 ms

--- google.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3011ms
rtt min/avg/max/mdev = 78.169/327.056/1007.016/393.086 ms, pipe 2
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$
```

j) File Compression:

a. Compress the "docs" directory into a zip file. b. Extract the contents of the zip file into a new directory.

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ tar -cvzf docs.tar.gz docs
```

```
docs/
docs/file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ mkdir extracted_docs
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ tar -xvzf docs.tar.gz -c
extracted_docs
tar: You may not specify more than one '-Acdrux', '--delete' or '--test-label' option
Try 'tar --help' or 'tar --usage' for more information.
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l extracted_docs
total 0
```

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ tar -cvzf docs.tar.gz docs
docs/
docs/file2.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ mkdir extracted_docs
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ tar -xvzf docs.tar.gz -c extracted_docs
tar: You may not specify more than one '-Acdrux', '--delete' or '--test-label' option
Try 'tar --help' or 'tar --usage' for more information.
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ ls -l extracted_docs
total 0
```

k) File Editing:

a. Open the "file1.txt" file in a text editor and add some text to it. b. Replace a specific word in the "file1.txt" file with another word (provide the original word and the word to replace it with).

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cat file1.txt
cat: file1.txt: No such file or directory
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ nano file1.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cat file1.txt
This is my first file
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ sed -i 's/first/new/g'
file1.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cat file1.txt
This is my new file
```

```
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cat file1.txt
cat: file1.txt: No such file or directory
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ nano file1.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cat file1.txt
This is my first file
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ sed -i 's/first/new/g' file1.txt
cdac@DESKTOP-4UCUGOV:~/LinuxAssignment$ cat file1.txt
This is my new file
```