

Assignment 1

Concepts of Operating System

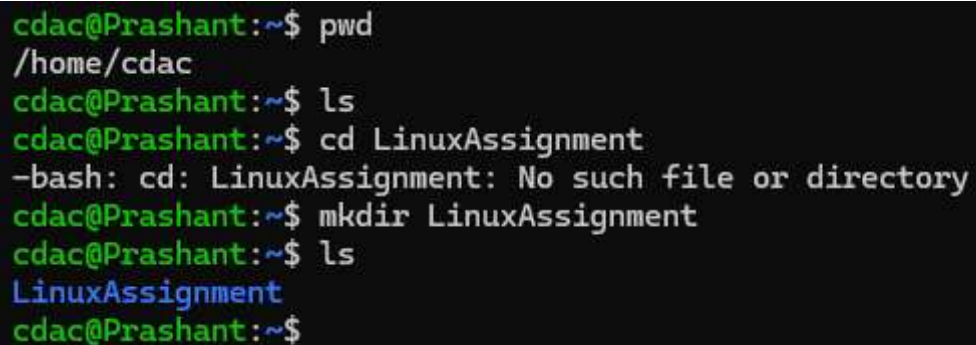
Problem 1

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@Prashant:~$ pwd
/home/cdac
cdac@Prashant:~$ ls
cdac@Prashant:~$ cd LinuxAssignment
-bash: cd: LinuxAssignment: No such file or directory
cdac@Prashant:~$ mkdir LinuxAssignment
cdac@Prashant:~$ ls
LinuxAssignment
cdac@Prashant:~$
```



```
cdac@Prashant:~$ pwd
/home/cdac
cdac@Prashant:~$ ls
cdac@Prashant:~$ cd LinuxAssignment
-bash: cd: LinuxAssignment: No such file or directory
cdac@Prashant:~$ mkdir LinuxAssignment
cdac@Prashant:~$ ls
LinuxAssignment
cdac@Prashant:~$
```

b) File Management:

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

ANS:

```
cdac@Prashant:~$ ls
```

```
LinuxAssignment
```

```
cdac@Prashant:~$ cd LinuxAssignment
```

```
cdac@Prashant:~/LinuxAssignment$ touch file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$ cat file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$ nano file1.txt
```

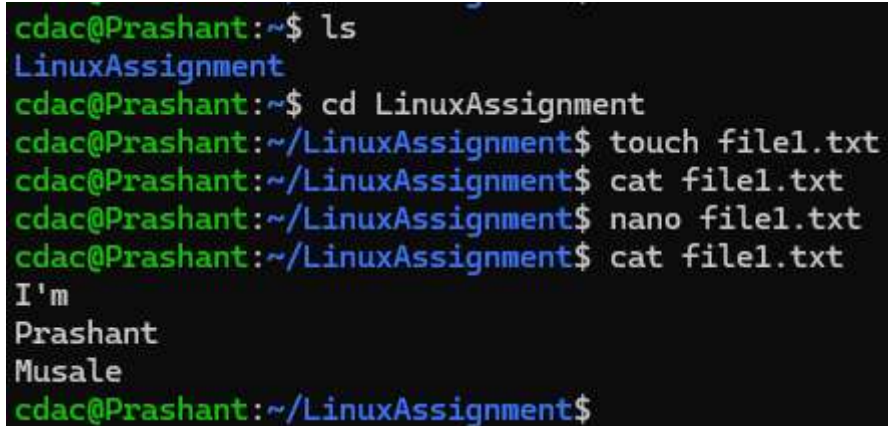
```
cdac@Prashant:~/LinuxAssignment$ cat file1.txt
```

```
I'm
```

```
Prashant
```

```
Musale
```

```
cdac@Prashant:~/LinuxAssignment$
```

A terminal window with a black background and green text. It shows the following commands and their outputs:

```
cdac@Prashant:~$ ls
LinuxAssignment
cdac@Prashant:~$ cd LinuxAssignment
cdac@Prashant:~/LinuxAssignment$ touch file1.txt
cdac@Prashant:~/LinuxAssignment$ cat file1.txt
cdac@Prashant:~/LinuxAssignment$ nano file1.txt
cdac@Prashant:~/LinuxAssignment$ cat file1.txt
I'm
Prashant
Musale
cdac@Prashant:~/LinuxAssignment$
```

c) Directory Management:

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

Ans:

```
cdac@Prashant:~/LinuxAssignment$ pwd
```

```
/home/cdac/LinuxAssignment
```

```
cdac@Prashant:~/LinuxAssignment$ ls
```

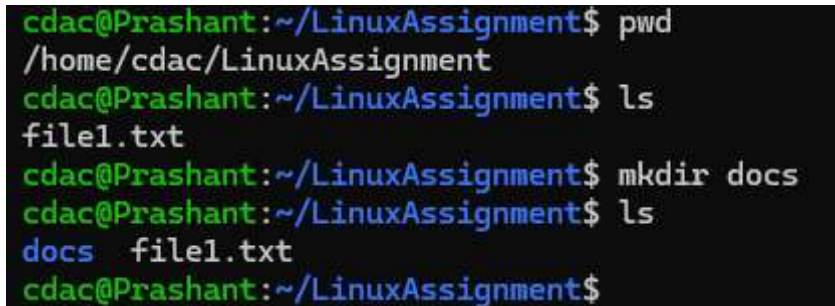
```
file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$ mkdir docs
```

```
cdac@Prashant:~/LinuxAssignment$ ls
```

```
docs file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$
```

A terminal window with a black background and green text. It shows the following commands and output:

```
cdac@Prashant:~/LinuxAssignment$ pwd
/home/cdac/LinuxAssignment
cdac@Prashant:~/LinuxAssignment$ ls
file1.txt
cdac@Prashant:~/LinuxAssignment$ mkdir docs
cdac@Prashant:~/LinuxAssignment$ ls
docs file1.txt
cdac@Prashant:~/LinuxAssignment$
```

d) Copy and Move Files:

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

Ans:

```
cdac@Prashant:~/LinuxAssignment$ ls
```

```
docs file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$ cp file1.txt docs
```

```
cdac@Prashant:~/LinuxAssignment$ cd docs/
```

```
cdac@Prashant:~/LinuxAssignment/docs$ ls
```

```
file1.txt
```

```
cdac@Prashant:~/LinuxAssignment/docs$ mv file1.txt file2.txt
```

```
cdac@Prashant:~/LinuxAssignment/docs$ ls
```

```
file2.txt
```

```
cdac@Prashant:~/LinuxAssignment/docs$
```

```
cdac@Prashant:~/LinuxAssignment$ ls
docs  file1.txt
cdac@Prashant:~/LinuxAssignment$ cp file1.txt docs
cdac@Prashant:~/LinuxAssignment$ cd docs/
cdac@Prashant:~/LinuxAssignment/docs$ ls
file1.txt
cdac@Prashant:~/LinuxAssignment/docs$ mv file1.txt file2.txt
cdac@Prashant:~/LinuxAssignment/docs$ ls
file2.txt
cdac@Prashant:~/LinuxAssignment/docs$
```

e) 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.

Ans:

```
cdac@Prashant:~/LinuxAssignment$ cd docs
```

```
cdac@Prashant:~/LinuxAssignment/docs$ chmod 744 file2.txt
```

```
cdac@Prashant:~/LinuxAssignment/docs$ ls -l
```

```
total 4
```

```
-rwxr--r-- 1 cdac cdac 20 Feb 27 17:37 file2.txt
```

```
cdac@Prashant:~/LinuxAssignment/docs$ chown $(whoami) file2.txt
```

```
cdac@Prashant:~/LinuxAssignment/docs$ ls -l file2.txt
```

```
-rwxr--r-- 1 cdac cdac 20 Feb 27 17:37 file2.txt
```

cdac@Prashant:~/LinuxAssignment/docs\$

```
cdac@Prashant:~/LinuxAssignment$ cd docs
cdac@Prashant:~/LinuxAssignment/docs$ chmod 744 file2.txt
cdac@Prashant:~/LinuxAssignment/docs$ ls -l
total 4
-rwxr--r-- 1 cdac cdac 20 Feb 27 17:37 file2.txt
cdac@Prashant:~/LinuxAssignment/docs$ chown $(whoami) file2.txt
cdac@Prashant:~/LinuxAssignment/docs$ ls -l file2.txt
-rwxr--r-- 1 cdac cdac 20 Feb 27 17:37 file2.txt
cdac@Prashant:~/LinuxAssignment/docs$
```

f) Final Checklist:

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

Ans :

cdac@Prashant:~/LinuxAssignment/docs\$ cd ..

cdac@Prashant:~/LinuxAssignment\$

cdac@Prashant:~/LinuxAssignment\$

cdac@Prashant:~/LinuxAssignment\$ cd docs

cdac@Prashant:~/LinuxAssignment/docs\$ chmod 744 file2.txt

cdac@Prashant:~/LinuxAssignment/docs\$ ls -l

total 4

-rwxr--r-- 1 cdac cdac 20 Feb 27 17:37 file2.txt

cdac@Prashant:~/LinuxAssignment/docs\$ chown \$(whoami) file2.txt

cdac@Prashant:~/LinuxAssignment/docs\$ ls -l file2.txt

-rwxr--r-- 1 cdac cdac 20 Feb 27 17:37 file2.txt

cdac@Prashant:~/LinuxAssignment/docs\$

cdac@Prashant:~/LinuxAssignment/docs\$

cdac@Prashant:~/LinuxAssignment/docs\$ cd ..

```
cdac@Prashant:~/LinuxAssignment$ ls -l LinuxAssignment
ls: cannot access 'LinuxAssignment': No such file or directory
cdac@Prashant:~/LinuxAssignment$ ls -l ~/LinuxAssignment
total 8
drwxr-xr-x 2 cdac cdac 4096 Feb 27 17:38 docs
-rw-r--r-- 1 cdac cdac 20 Feb 27 17:24 file1.txt
cdac@Prashant:~/LinuxAssignment$ ls -l/
ls: invalid option -- '/'
Try 'ls --help' for more information.
cdac@Prashant:~/LinuxAssignment$ ls -l /
total 2448
lrwxrwxrwx 1 root root 7 Apr 22 2024 bin -> usr/bin
drwxr-xr-x 2 root root 4096 Feb 26 2024 bin.usr-is-merged
drwxr-xr-x 2 root root 4096 Apr 22 2024 boot
drwxr-xr-x 16 root root 3580 Feb 27 14:18 dev
drwxr-xr-x 87 root root 4096 Feb 27 14:18 etc
drwxr-xr-x 3 root root 4096 Feb 24 12:03 home
-rwxrwxrwx 1 root root 2424984 Feb 12 00:59 init
lrwxrwxrwx 1 root root 7 Apr 22 2024 lib -> usr/lib
drwxr-xr-x 2 root root 4096 Apr 8 2024 lib.usr-is-merged
lrwxrwxrwx 1 root root 9 Apr 22 2024 lib64 -> usr/lib64
drwx----- 2 root root 16384 Feb 24 12:02 lost+found
drwxr-xr-x 2 root root 4096 Jan 6 20:13 media
drwxr-xr-x 7 root root 4096 Feb 24 12:03 mnt
drwxr-xr-x 2 root root 4096 Jan 6 20:13 opt
dr-xr-xr-x 200 root root 0 Feb 27 14:18 proc
```

```
drwx----- 4 root root 4096 Feb 24 12:03 root
drwxr-xr-x 18 root root 540 Feb 27 14:18 run
lrwxrwxrwx 1 root root 8 Apr 22 2024 sbin -> usr/sbin
drwxr-xr-x 2 root root 4096 Mar 31 2024 sbin.usr-is-merged
drwxr-xr-x 2 root root 4096 Feb 24 12:02 snap
drwxr-xr-x 2 root root 4096 Jan 6 20:13 srv
dr-xr-xr-x 11 root root 0 Feb 27 14:18 sys
drwxrwxrwt 11 root root 4096 Feb 27 15:25 tmp
drwxr-xr-x 12 root root 4096 Jan 6 20:13 usr
drwxr-xr-x 13 root root 4096 Feb 24 12:03 var
cdac@Prashant:~/LinuxAssignment$
```

```

cdac@Prashant:~/LinuxAssignment/docs$ cd ..
cdac@Prashant:~/LinuxAssignment$
cdac@Prashant:~/LinuxAssignment$
cdac@Prashant:~/LinuxAssignment$ cd docs
cdac@Prashant:~/LinuxAssignment/docs$ chmod 744 file2.txt
cdac@Prashant:~/LinuxAssignment/docs$ ls -l
total 4
-rwxr--r-- 1 cdac cdac 20 Feb 27 17:37 file2.txt
cdac@Prashant:~/LinuxAssignment/docs$ chown $(whoami) file2.txt
cdac@Prashant:~/LinuxAssignment/docs$ ls -l file2.txt
-rwxr--r-- 1 cdac cdac 20 Feb 27 17:37 file2.txt
cdac@Prashant:~/LinuxAssignment/docs$
cdac@Prashant:~/LinuxAssignment/docs$
cdac@Prashant:~/LinuxAssignment/docs$ cd ..
cdac@Prashant:~/LinuxAssignment$ ls -l LinuxAssignment
ls: cannot access 'LinuxAssignment': No such file or directory
cdac@Prashant:~/LinuxAssignment$ ls -l ~/LinuxAssignment
total 8
drwxr-xr-x 2 cdac cdac 4096 Feb 27 17:38 docs
-rw-r--r-- 1 cdac cdac 20 Feb 27 17:24 file1.txt
cdac@Prashant:~/LinuxAssignment$ ls -l/
ls: invalid option -- '/'
Try 'ls --help' for more information.
cdac@Prashant:~/LinuxAssignment$ ls -l /
total 2448
lrwxrwxrwx 1 root root 7 Apr 22 2024 bin -> usr/bin
drwxr-xr-x 2 root root 4096 Feb 26 2024 bin.usr-is-merged
drwxr-xr-x 2 root root 4096 Apr 22 2024 boot
drwxr-xr-x 16 root root 3580 Feb 27 14:18 dev
drwxr-xr-x 87 root root 4096 Feb 27 14:18 etc
drwxr-xr-x 3 root root 4096 Feb 24 12:03 home
-rwxrwxrwx 1 root root 2424984 Feb 12 00:59 init
lrwxrwxrwx 1 root root 7 Apr 22 2024 lib -> usr/lib
drwxr-xr-x 2 root root 4096 Apr 8 2024 lib.usr-is-merged
lrwxrwxrwx 1 root root 9 Apr 22 2024 lib64 -> usr/lib64

```



```

drwx-----  2 root root 16384 Feb 24 12:02 lost+found
drwxr-xr-x   2 root root  4096 Jan  6 20:13 media
drwxr-xr-x   7 root root  4096 Feb 24 12:03 mnt
drwxr-xr-x   2 root root  4096 Jan  6 20:13 opt
dr-xr-xr-x 200 root root    0 Feb 27 14:18 proc
drwx-----  4 root root  4096 Feb 24 12:03 root
drwxr-xr-x  18 root root   540 Feb 27 14:18 run
lrwxrwxrwx   1 root root    8 Apr 22  2024 sbin -> usr/sbin
drwxr-xr-x   2 root root  4096 Mar 31  2024 sbin.usr-is-merged
drwxr-xr-x   2 root root  4096 Feb 24 12:02 snap
drwxr-xr-x   2 root root  4096 Jan  6 20:13 srv
dr-xr-xr-x  11 root root    0 Feb 27 14:18 sys
drwxrwxrwt  11 root root  4096 Feb 27 15:25 tmp
drwxr-xr-x  12 root root  4096 Jan  6 20:13 usr
drwxr-xr-x  13 root root  4096 Feb 24 12:03 var
cdac@Prashant:~/LinuxAssignment$

```

g) File Searching:

a. Search for all files with the extension ".txt" in the current directory and its subdirectories.

Ans:

```
cdac@Prashant:~/LinuxAssignment$ ls
```

```
docs file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$ find .txt
```

```
find: '.txt': No such file or directory
```

```
cdac@Prashant:~/LinuxAssignment$ find find . -type f -name "*.txt"
```

```
find: 'find': No such file or directory
```

```
./file1.txt
```

```
./docs/file2.txt
```

```
cdac@Prashant:~/LinuxAssignment$
```

```
cdac@Prashant:~/LinuxAssignment$ ls
docs  file1.txt
cdac@Prashant:~/LinuxAssignment$ find .txt
find: '.txt': No such file or directory
cdac@Prashant:~/LinuxAssignment$ find find . -type f -name "*.txt"
find: 'find': No such file or directory
./file1.txt
./docs/file2.txt
cdac@Prashant:~/LinuxAssignment$
```

b. Display lines containing a specific word in a file (provide a file name and the specific word to search).

Ans:

```
cdac@Prashant:~/LinuxAssignment$ nano file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$ cat file1.txt
```

A computer is an electronic device that was discovered by Charles Babbage. He is known as the father of computers. There are various parts to a computer. The four major parts of a computer are the mouse, keyboard, monitor and CPU. With computers, we can send and receive messages through emails and save important information. It helps to store and modify data. Nowadays, computers are used in schools, banks, offices, etc., and it is now impossible to survive without computers. In order to run any organisation, institution, or any other office, a computer is a must. Computers have made life easier for people of different age groups.

```
cdac@Prashant:~/LinuxAssignment$ grep "computer" file1.txt
```

A computer is an electronic device that was discovered by Charles Babbage. He is known as the father of computers. There are various parts to a computer. The four major parts of a computer are the mouse, keyboard, monitor and CPU. With computers, we can send and receive messages through emails and save important information. It helps to store and modify data. Nowadays, computers are used in schools, banks, offices, etc., and it is now impossible to survive without computers. In order to run any organisation, institution, or any other office, a computer is a must. Computers have made life easier for people of different age groups.

```
cdac@Prashant:~/LinuxAssignment$
```

```
cdac@Prashant:~/LinuxAssignment$ nano file1.txt
cdac@Prashant:~/LinuxAssignment$ cat file1.txt
A computer is an electronic device that was discovered by Charles Babbage. He is known as the father of computers. There are various parts to a computer. The four major parts of a computer are the mouse, keyboard, monitor and CPU. With computers, we can send and receive messages through emails and save important information. It helps to store and modify data. Nowadays, computers are used in schools, banks, offices, etc., and it is now impossible to survive without computers. In order to run any organisation, institution, or any other office, a computer is a must. Computers have made life easier for people of different age groups.
cdac@Prashant:~/LinuxAssignment$ grep "computer" file1.txt
A computer is an electronic device that was discovered by Charles Babbage. He is known as the father of computers. There are various parts to a computer. The four major parts of a computer are the mouse, keyboard, monitor and CPU. With computers, we can send and receive messages through emails and save important information. It helps to store and modify data. Nowadays, computers are used in schools, banks, offices, etc., and it is now impossible to survive without computers. In order to run any organisation, institution, or any other office, a computer is a must. Computers have made life easier for people of different age groups.
cdac@Prashant:~/LinuxAssignment$
```

h) System Information:

a. Display the current system date and time.

Ans:

```
cdac@Prashant:~/LinuxAssignment$ date
```

```
Thu Feb 27 18:15:25 UTC 2025
```

```
cdac@Prashant:~/LinuxAssignment$
```

```
cdac@Prashant:~/LinuxAssignment$ date
Thu Feb 27 18:15:25 UTC 2025
cdac@Prashant:~/LinuxAssignment$
```

i) Networking:

a. Display the IP address of the system.

Ans:

```
cdac@Prashant:~/LinuxAssignment$ ipconfig.exe
```

Windows IP Configuration

Ethernet adapter vEthernet (WSL (Hyper-V firewall)):

Connection-specific DNS Suffix . :

Link-local IPv6 Address : fe80::cd38:e6ab:7aaa:2387%31

IPv4 Address. : 172.26.208.1

Subnet Mask : 255.255.240.0

Default Gateway :

Ethernet adapter Ethernet:

Connection-specific DNS Suffix . :

IPv6 Address. : 2401:4900:881c:de7c:2345:4a8f:3cbd:dba7

Temporary IPv6 Address. : 2401:4900:881c:de7c:14ff:9907:8a6:945f

Link-local IPv6 Address : fe80::139e:a0bc:a3b7:c861%5

IPv4 Address. : 192.168.1.3

Subnet Mask : 255.255.255.0

Default Gateway : fe80::1%5

192.168.1.1

Wireless LAN adapter Local Area Connection* 1:

Media State : Media disconnected

Connection-specific DNS Suffix . :

Wireless LAN adapter Local Area Connection* 2:

Media State : Media disconnected

Connection-specific DNS Suffix . :

Wireless LAN adapter Wi-Fi:

Media State : Media disconnected

Connection-specific DNS Suffix . :

Ethernet adapter Bluetooth Network Connection:

Media State : Media disconnected

Connection-specific DNS Suffix . :

cdac@Prashant:~/LinuxAssignment\$

```

cdac@Prashant:~/LinuxAssignment$ ipconfig.exe

Windows IP Configuration

Ethernet adapter vEthernet (WSL (Hyper-V firewall)):
```

Connection-specific DNS Suffix	:	
Link-local IPv6 Address	:	fe80::cd38:e6ab:7aaa:2387%31
IPv4 Address.	:	172.26.208.1
Subnet Mask	:	255.255.240.0
Default Gateway	:	

```

Ethernet adapter Ethernet:
```

Connection-specific DNS Suffix	:	
IPv6 Address.	:	2401:4900:881c:de7c:2345:4a8f:3cbd:dba7
Temporary IPv6 Address.	:	2401:4900:881c:de7c:14ff:9907:8a6:945f
Link-local IPv6 Address	:	fe80::139e:a0bc:a3b7:c861%5
IPv4 Address.	:	192.168.1.3
Subnet Mask	:	255.255.255.0
Default Gateway	:	fe80::1%5
	:	192.168.1.1

```

Wireless LAN adapter Local Area Connection* 1:

Media State . . . . . : Media disconnected
Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 2:

Media State . . . . . : Media disconnected
Connection-specific DNS Suffix  . :

Wireless LAN adapter Wi-Fi:

Media State . . . . . : Media disconnected
Connection-specific DNS Suffix  . :

Ethernet adapter Bluetooth Network Connection:

Media State . . . . . : Media disconnected
Connection-specific DNS Suffix  . :
cdac@Prashant:~/LinuxAssignment$
```

b. Ping a remote server to check connectivity (provide a remote server address to ping).

Ans:

```
cdac@Prashant:~/LinuxAssignment$ ping 157.240.192.0/18
```

```
ping: 157.240.192.0/18: Name or service not known
```

```
cdac@Prashant:~/LinuxAssignment$ ping -c 4 facebook.com
```

```
PING facebook.com (57.144.146.1) 56(84) bytes of data.
```

64 bytes from edge-star-mini-shv-03-del2.facebook.com (57.144.146.1): icmp_seq=1
ttl=55 time=60.2 ms

64 bytes from edge-star-mini-shv-03-del2.facebook.com (57.144.146.1): icmp_seq=2
ttl=55 time=60.2 ms

64 bytes from edge-star-mini-shv-03-del2.facebook.com (57.144.146.1): icmp_seq=3
ttl=55 time=60.2 ms

64 bytes from edge-star-mini-shv-03-del2.facebook.com (57.144.146.1): icmp_seq=4
ttl=55 time=59.9 ms

--- facebook.com ping statistics ---

4 packets transmitted, 4 received, 0% packet loss, time 3005ms

rtt min/avg/max/mdev = 59.882/60.138/60.235/0.148 ms

cdac@Prashant:~/LinuxAssignment\$

```
cdac@Prashant:~/LinuxAssignment$ ping 157.240.192.0/18
ping: 157.240.192.0/18: Name or service not known
cdac@Prashant:~/LinuxAssignment$ ping -c 4 facebook.com
PING facebook.com (57.144.146.1) 56(84) bytes of data.
64 bytes from edge-star-mini-shv-03-del2.facebook.com (57.144.146.1): icmp_seq=1 ttl=55 time=60.2 ms
64 bytes from edge-star-mini-shv-03-del2.facebook.com (57.144.146.1): icmp_seq=2 ttl=55 time=60.2 ms
64 bytes from edge-star-mini-shv-03-del2.facebook.com (57.144.146.1): icmp_seq=3 ttl=55 time=60.2 ms
64 bytes from edge-star-mini-shv-03-del2.facebook.com (57.144.146.1): icmp_seq=4 ttl=55 time=59.9 ms

--- facebook.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3005ms
rtt min/avg/max/mdev = 59.882/60.138/60.235/0.148 ms
cdac@Prashant:~/LinuxAssignment$
```

j) File Compression:

a. Compress the "docs" directory into a zip file.

Ans:

cdac@Prashant:~/LinuxAssignment\$ zip -r docs.zip docs

adding: docs/ (stored 0%)

adding: docs/file2.txt (stored 0%)

cdac@Prashant:~/LinuxAssignment\$

```
cdac@Prashant:~/LinuxAssignment$ zip -r docs.zip docs
adding: docs/ (stored 0%)
adding: docs/file2.txt (stored 0%)
cdac@Prashant:~/LinuxAssignment$
```

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

Ans:

```
cdac@Prashant:~/LinuxAssignment$ ls
```

```
docs docs.zip file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$ mkdir docs1
```

```
cdac@Prashant:~/LinuxAssignment$ ls
```

```
docs docs.zip docs1 file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$ unzip docs.zip docs1
```

```
Archive: docs.zip
```

```
caution: filename not matched: docs1
```

```
cdac@Prashant:~/LinuxAssignment$ unzip docs.zip -d docs1
```

```
Archive: docs.zip
```

```
creating: docs1/docs/
```

```
extracting: docs1/docs/file2.txt
```

```
cdac@Prashant:~/LinuxAssignment$ ls
```

```
docs docs.zip docs1 file1.txt
```



```

cdac@Prashant:~/LinuxAssignment$ ls
docs docs.zip file1.txt
cdac@Prashant:~/LinuxAssignment$ mkdir docs1
cdac@Prashant:~/LinuxAssignment$ ls
docs docs.zip docs1 file1.txt
cdac@Prashant:~/LinuxAssignment$ unzip docs.zip docs1
Archive: docs.zip
caution: filename not matched: docs1
cdac@Prashant:~/LinuxAssignment$ unzip docs.zip -d docs1
Archive: docs.zip
creating: docs1/docs/
extracting: docs1/docs/file2.txt
cdac@Prashant:~/LinuxAssignment$ ls
docs docs.zip docs1 file1.txt

```

k) File Editing:

a. Open the "file1.txt" file in a text editor and add some text to it.

Ans:

```
cdac@Prashant:~/LinuxAssignment$ ls
```

```
docs docs.zip docs1 file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$ nano file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$ cat file1.txt
```

It is at school that I learn so much. I learn so many different subjects. There are many interesting co-curricular activities too. I also participate in extra-curricular activities like music, dance, art, craft and plays. I also get the opportunity to take part in sports and games on the sports grounds at school. I am part of the school's volleyball team. Our teachers teach us with a great deal of care and patience, and I am very grateful to the teachers. At school I have many good friends. We study, play and eat together. I love my school very much.

```
cdac@Prashant:~/LinuxAssignment$
```

```

cdac@Prashant:~/LinuxAssignment$ ls
docs docs.zip docs1 file1.txt
cdac@Prashant:~/LinuxAssignment$ nano file1.txt
cdac@Prashant:~/LinuxAssignment$ cat file1.txt
It is at school that I learn so much. I learn so many different subjects. There are many interesting co-curricular activities too. I also participate in extra-curricular activities like music, dance, art, craft and plays. I also get the opportunity to take part in sports and games on the sports grounds at school. I am part of the school's volleyball team. Our teachers teach us with a great deal of care and patience, and I am very grateful to the teachers. At school I have many good friends. We study, play and eat together. I love my school very much.
cdac@Prashant:~/LinuxAssignment$

```

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

Ans:

```
cdac@Prashant:~/LinuxAssignment$ ls
```

```
docs docs.zip docs1 file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$ nano file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$ cat file1.txt
```

It is at school that I learn so much. I learn so many different subjects. There are many interesting co-curricular activities too. I also participate in extra-curricular activities like music, dance, art, craft and plays. I also get the opportunity to take part in sports and games on the sports grounds at school. I am part of the school's volleyball team. Our teachers teach us with a great deal of care and patience, and I am very grateful to the teachers. At school I have many good friends. We study, play and eat together. I love my school very much.

```
cdac@Prashant:~/LinuxAssignment$ ls
```

```
docs docs.zip docs1 file1.txt
```

```
cdac@Prashant:~/LinuxAssignment$ sed 's/school/college/g' file1.txt
```

It is at college that I learn so much. I learn so many different subjects. There are many interesting co-curricular activities too. I also participate in extra-curricular activities like music, dance, art, craft and plays. I also get the opportunity to take part in sports and games on the sports grounds at college. I am part of the college's volleyball team. Our teachers teach us with a great deal of care and patience, and I am very grateful to the teachers. At college I have many good friends. We study, play and eat together. I love my college very much.

```
cdac@Prashant:~/LinuxAssignment$
```

```
cdac@Prashant:~/LinuxAssignment$ ls
docs docs.zip docs1 file1.txt
cdac@Prashant:~/LinuxAssignment$ nano file1.txt
cdac@Prashant:~/LinuxAssignment$ cat file1.txt
It is at school that I learn so much. I learn so many different subjects. There are many interesting co-curricular activities too. I also participate in extra-curricular activities like music, dance, art, craft and plays. I also get the opportunity to take part in sports and games on the sports grounds at school. I am part of the school's volleyball team. Our teachers teach us with a great deal of care and patience, and I am very grateful to the teachers. At school I have many good friends. We study, play and eat together. I love my school very much.
cdac@Prashant:~/LinuxAssignment$ ls
docs docs.zip docs1 file1.txt
cdac@Prashant:~/LinuxAssignment$ sed 's/school/college/g' file1.txt
It is at college that I learn so much. I learn so many different subjects. There are many interesting co-curricular activities too. I also participate in extra-curricular activities like music, dance, art, craft and plays. I also get the opportunity to take part in sports and games on the sports grounds at college. I am part of the college's volleyball team. Our teachers teach us with a great deal of care and patience, and I am very grateful to the teachers. At college I have many good friends. We study, play and eat together. I love my college very much.
cdac@Prashant:~/LinuxAssignment$
```

