

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.

```
cdac@LAPTOP-MC4RDE4D: ~ $ ls
CPP  'CPP FILE'  linuxassignment
cdac@LAPTOP-MC4RDE4D: ~ $ cd linuxassignment
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $ nano
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $ mkdir
Command 'mkdir' not found, did you mean:
  command 'mkdir' from deb coreutils (9.4-2ubuntu2)
Try: apt install <deb name>
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $ mkdir file1.txt
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $ ls
docs  file1.txt  file2.txt
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $
```

```
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $ chmod 744 docs/file2.txt
chmod: cannot access 'docs/file2.txt': No such file or directory
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $ chmod 744 docs/file2.txt
chmod: cannot access 'docs/file2.txt': No such file or directory
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $ ls
docs  file1.txt  file2.txt
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $ chmod 744 docs/file2.txt
chmod: cannot access 'docs/file2.txt': No such file or directory
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $ cd file2.txt
bash: cd: file2.txt: Not a directory
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $ nano file2.txt
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $ chmod 744 docs/file2.txt
chmod: cannot access 'docs/file2.txt': No such file or directory
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $ ls -l
docs
file1.txt
file2.txt
cdac@LAPTOP-MC4RDE4D: ~/linuxassignment $
```

```
cdac@LAPTOP-MC4RDE4D: ~  
bash: cd: file2.txt: Not a directory  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$ nano file2.txt  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$ chmod 744 docs/file2.txt  
chmod: cannot access 'docs/file2.txt': No such file or directory  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$ ls -l  
docs  
file1.txt  
file2.txt  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$ ls -l/  
ls: invalid option -- '/'  
Try 'ls --help' for more information.  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$ ls -l /  
bin  
bin.usr-is-merged  
boot  
dev  
etc  
home  
init  
lib  
lib.usr-is-merged  
lib64  
lost+found  
media  
mnt  
opt  
proc  
root  
run  
sbin  
sbin.usr-is-merged  
snap  
srv  
sys  
tmp  
usr  
var  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$
```

```
cdac@LAPTOP-MC4RDE4D: ~  
chmod: cannot access 'docs/file2.txt': No such file or directory  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$ ls -l  
docs  
file1.txt  
file2.txt  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$ ls -l/  
ls: invalid option -- '/'  
Try 'ls --help' for more information.  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$ ls -l /  
bin  
bin.usr-is-merged  
boot  
dev  
etc  
home  
init  
lib  
lib.usr-is-merged  
lib64  
lost+found  
media  
mnt  
opt  
proc  
root  
run  
sbin  
sbin.usr-is-merged  
snap  
srv  
sys  
tmp  
usr  
var  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$ find . -name "file1.txt"  
./docs/file1.txt  
./file1.txt  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$
```

```
cdac@LAPTOP-MC4RDE4D: ~  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$ date  
Thu Feb 27 14:29:03 UTC 2025  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$
```

```
cdac@LAPTOP-MC4RDE4D: ~  
dnsdomainname          display dns domain name  
hostname -V|--version|-h|--help  print info and exit  
  
Program name:  
{yp,nis,}domainname=hostname -y  
dnsdomainname=hostname -d  
  
Program options:  
-a, --alias             alias names  
-A, --all-fqdns         all long host names (FQDNs)  
-b, --boot              set default hostname if none available  
-d, --domain            DNS domain name  
-f, --fqdn, --long      long host name (FQDN)  
-F, --file              read host name or NIS domain name from given file  
-i, --ip-address        addresses for the host name  
-I, --all-ip-addresses  all addresses for the host  
-s, --short             short host name  
-y, --yp, --nis         NIS/YP domain name  
  
Description:  
This command can get or set the host name or the NIS domain name. You can  
also get the DNS domain or the FQDN (fully qualified domain name).  
Unless you are using bind or NIS for host lookups you can change the  
FQDN (Fully Qualified Domain Name) and the DNS domain name (which is  
part of the FQDN) in the /etc/hosts file.  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$ ping -c 4 google.com  
PING google.com (142.250.77.46) 56(84) bytes of data:  
64 bytes from bom07s26-in-f14.1e100.net (142.250.77.46): icmp_seq=1 ttl=57 time=55.3 ms  
64 bytes from bom07s26-in-f14.1e100.net (142.250.77.46): icmp_seq=2 ttl=57 time=36.4 ms  
64 bytes from bom07s26-in-f14.1e100.net (142.250.77.46): icmp_seq=3 ttl=57 time=27.4 ms  
64 bytes from bom07s26-in-f14.1e100.net (142.250.77.46): icmp_seq=4 ttl=57 time=25.1 ms  
  
--- google.com ping statistics ---  
4 packets transmitted, 4 received, 0% packet loss, time 3006ms  
rtt min/avg/max/mdev = 25.125/36.038/55.280/11.882 ms  
cdac@LAPTOP-MC4RDE4D:~/linuxassignment$
```

```
cdac@LAPTOP-MC4RDE4D: ~  
root@LAPTOP-MC4RDE4D: ~  
root@LAPTOP-MC4RDE4D:~# apt install zip  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  unzip  
The following NEW packages will be installed:  
  unzip zip  
0 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.  
Need to get 350 kB of archives.  
After this operation, 933 kB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 unzip amd64 6.0-28ubuntu4.1 [174 kB]  
Err:2 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 zip amd64 3.0-13ubuntu0.1  
  404 Not Found [IP: 185.125.190.83 80]  
Fetched 174 kB in 2s (92.9 kB/s)  
E: Failed to fetch http://archive.ubuntu.com/ubuntu/pool/main/z/zip/zip_3.0-13ubuntu0.1_amd64.deb 404 Not Found [IP: 185.125.190.83 80]  
E: Unable to fetch some archives, maybe run apt-get update or try with --fix-missing?  
root@LAPTOP-MC4RDE4D:~# sudo apt install zip  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  unzip  
The following NEW packages will be installed:  
  unzip zip  
0 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.  
Need to get 176 kB/350 kB of archives.  
After this operation, 933 kB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Err:1 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 zip amd64 3.0-13ubuntu0.1  
  404 Not Found [IP: 185.125.190.82 80]  
E: Failed to fetch http://archive.ubuntu.com/ubuntu/pool/main/z/zip/zip_3.0-13ubuntu0.1_amd64.deb 404 Not Found [IP: 185.125.190.82 80]  
E: Unable to fetch some archives, maybe run apt-get update or try with --fix-missing?  
root@LAPTOP-MC4RDE4D:~# nano file1.txt  
root@LAPTOP-MC4RDE4D:~# sed -i 's/cat/rain/g' file1.txt  
root@LAPTOP-MC4RDE4D:~# nano file1.txt  
root@LAPTOP-MC4RDE4D:~#
```

```
cdac@LAPTOP-MC4RDE4D: ~  
cdac@LAPTOP-MC4RDE4D:~$ pws  
Command 'pws' not found, did you mean:  
  command 'pwd' from deb coreutils (9.4-2ubuntu2)  
  command 'pcs' from deb pcs (0.11.6-1ubuntu1)  
  command 'pvs' from deb lvm2 (2.03.16-3ubuntu3.1)  
  command 'ps' from deb procps (2:4.0.4-4ubuntu3.2)  
Try: apt install <deb name>  
cdac@LAPTOP-MC4RDE4D:~$ pwd  
/home/cdac  
cdac@LAPTOP-MC4RDE4D:~$ cd  
cdac@LAPTOP-MC4RDE4D:~$ ls  
CPP 'CPP FILE' linuxassignment  
cdac@LAPTOP-MC4RDE4D:~$ cd linux assignment  
bash: cd: too many arguments  
cdac@LAPTOP-MC4RDE4D:~$ ls  
CPP 'CPP FILE' linuxassignment  
cdac@LAPTOP-MC4RDE4D:~$ linux assignment  
linux: command not found  
cdac@LAPTOP-MC4RDE4D:~$ nano linux assignment  
cdac@LAPTOP-MC4RDE4D:~$ cd CPP  
cdac@LAPTOP-MC4RDE4D:~/CPP$ ls  
cdac@LAPTOP-MC4RDE4D:~/CPP$ ls  
cdac@LAPTOP-MC4RDE4D:~/CPP$ nano linuxassignment  
cdac@LAPTOP-MC4RDE4D:~/CPP$  
cdac@LAPTOP-MC4RDE4D:~/CPP$ ls  
numbers.txt  
cdac@LAPTOP-MC4RDE4D:~/CPP$ head -10 numbers.txt  
1  
2  
3  
4  
5  
6  
7  
8  
90  
12  
cdac@LAPTOP-MC4RDE4D:~/CPP$
```

```
Try: apt install <deb name>  
cdac@LAPTOP-MC4RDE4D:~$ pwd  
/home/cdac  
cdac@LAPTOP-MC4RDE4D:~$ cd  
cdac@LAPTOP-MC4RDE4D:~$ ls  
CPP 'CPP FILE' linuxassignment  
cdac@LAPTOP-MC4RDE4D:~$ cd linux assignment  
bash: cd: too many arguments  
cdac@LAPTOP-MC4RDE4D:~$ ls  
CPP 'CPP FILE' linuxassignment  
cdac@LAPTOP-MC4RDE4D:~$ linux assignment  
linux: command not found  
cdac@LAPTOP-MC4RDE4D:~$ nano linux assignment  
cdac@LAPTOP-MC4RDE4D:~$ cd CPP  
cdac@LAPTOP-MC4RDE4D:~/CPP$ ls  
cdac@LAPTOP-MC4RDE4D:~/CPP$ ls  
cdac@LAPTOP-MC4RDE4D:~/CPP$ nano linuxassignment  
cdac@LAPTOP-MC4RDE4D:~/CPP$  
cdac@LAPTOP-MC4RDE4D:~/CPP$ ls  
numbers.txt  
cdac@LAPTOP-MC4RDE4D:~/CPP$ head -10 numbers.txt  
1  
2  
3  
4  
5  
6  
7  
8  
90  
12  
cdac@LAPTOP-MC4RDE4D:~/CPP$ tail -5 numbers.txt  
4  
5  
57  
88  
cdac@LAPTOP-MC4RDE4D:~/CPP$
```

```
cdac@LAPTOP-MC4RDE4D: ~  
bash: cd: too many arguments  
cdac@LAPTOP-MC4RDE4D:~$ ls  
CPP 'CPP FILE' linuxassignment  
cdac@LAPTOP-MC4RDE4D:~$ linux assignment  
linux: command not found  
cdac@LAPTOP-MC4RDE4D:~$ nano linux assignment  
cdac@LAPTOP-MC4RDE4D:~$ cd CPP  
cdac@LAPTOP-MC4RDE4D:~/CPP$ ls  
cdac@LAPTOP-MC4RDE4D:~/CPP$ ls  
cdac@LAPTOP-MC4RDE4D:~/CPP$ nano linuxassignment  
cdac@LAPTOP-MC4RDE4D:~/CPP$ ls  
numbers.txt  
cdac@LAPTOP-MC4RDE4D:~/CPP$ head -10 numbers.txt  
1  
2  
3  
4  
5  
6  
7  
8  
90  
12  
cdac@LAPTOP-MC4RDE4D:~/CPP$ tail -5 numbers.txt  
4  
5  
57  
88  
  
cdac@LAPTOP-MC4RDE4D:~/CPP$ mkdir assignment2  
cdac@LAPTOP-MC4RDE4D:~/CPP$ nano assignment2  
cdac@LAPTOP-MC4RDE4D:~/CPP$ tr '[:lower:]' '[:upper:]' <fruits.txt > output.txt  
cdac@LAPTOP-MC4RDE4D:~/CPP$ nano fruits.txt  
cdac@LAPTOP-MC4RDE4D:~/CPP$ ls  
assignment2 fruits.txt numbers.txt output.txt  
cdac@LAPTOP-MC4RDE4D:~/CPP$ nano output.txt  
cdac@LAPTOP-MC4RDE4D:~/CPP$
```

```
cdac@LAPTOP-MC4RDE4D: ~  
cdac@LAPTOP-MC4RDE4D:~/CPP$  
cdac@LAPTOP-MC4RDE4D:~/CPP$ ls  
numbers.txt  
cdac@LAPTOP-MC4RDE4D:~/CPP$ head -10 numbers.txt  
1  
2  
3  
4  
5  
6  
7  
8  
90  
12  
cdac@LAPTOP-MC4RDE4D:~/CPP$ tail -5 numbers.txt  
4  
5  
57  
88  
  
cdac@LAPTOP-MC4RDE4D:~/CPP$ mkdir assignment2  
cdac@LAPTOP-MC4RDE4D:~/CPP$ nano assignment2  
cdac@LAPTOP-MC4RDE4D:~/CPP$ tr '[:lower:]' '[:upper:]' <fruits.txt > output.txt  
cdac@LAPTOP-MC4RDE4D:~/CPP$ nano fruits.txt  
cdac@LAPTOP-MC4RDE4D:~/CPP$ ls  
assignment2 fruits.txt numbers.txt output.txt  
cdac@LAPTOP-MC4RDE4D:~/CPP$ nano output.txt  
cdac@LAPTOP-MC4RDE4D:~/CPP$ sort fruit.txt | uniq -c  
sort: cannot read: fruit.txt: No such file or directory  
cdac@LAPTOP-MC4RDE4D:~/CPP$ sort fruits.txt | uniq -c  
1  
1 apple  
1 banana  
1 grape  
1 mango  
1 orange  
1 papaya  
cdac@LAPTOP-MC4RDE4D:~/CPP$
```