

Problem 1: Read the instructions carefully and answer accordingly. If there is any need to insert some data then do that as well. 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@Sandesh: ~/LinuxAssignment
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 5.15.153.1-microsoft-standard-WSL2 x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

This message is shown once a day. To disable it please create the
/home/cdac/.hushlogin file.
cdac@Sandesh:~$ ls
LinuxAssignment data.txt duplicate.txt fruits.txt input.txt numbers.txt output.txt touch.txt
cdac@Sandesh:~$ rmdir LinuxAssignment
rmdir: failed to remove 'LinuxAssignment': Directory not empty
cdac@Sandesh:~$ rm LinuxAssignment
rm: cannot remove 'LinuxAssignment': Is a directory
cdac@Sandesh:~$ rm -ri LinuxAssignment
rm: descend into directory 'LinuxAssignment'? y
rm: remove regular empty file 'LinuxAssignment/file1.txt'? y
rm: descend into directory 'LinuxAssignment/LinuxAssignment'? y
rm: descend into directory 'LinuxAssignment/LinuxAssignment/docs'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/docs/file2.txt'? y
rm: remove directory 'LinuxAssignment/LinuxAssignment/docs'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/file1.txt'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/file2.txt'? y
rm: remove directory 'LinuxAssignment/LinuxAssignment'? y
rm: remove directory 'LinuxAssignment'? y
cdac@Sandesh:~$ mkdir LinuxAssignment
cdac@Sandesh:~$ cd LinuxAssignment
cdac@Sandesh:~/LinuxAssignment$ _
```

b) File Management: a. Inside the "LinuxAssignment" directory, create a new file named "file1.txt". Display its contents.

```
cdac@Sandesh: ~/LinuxAssignment
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

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cdac@Sandesh:~$ rm LinuxAssignment
rm: cannot remove 'LinuxAssignment': Is a directory
cdac@Sandesh:~$ rm -ri LinuxAssignment
rm: descend into directory 'LinuxAssignment'? y
rm: remove regular empty file 'LinuxAssignment/file1.txt'? y
rm: descend into directory 'LinuxAssignment/LinuxAssignment'? y
rm: descend into directory 'LinuxAssignment/LinuxAssignment/docs'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/docs/file2.txt'? y
rm: remove directory 'LinuxAssignment/LinuxAssignment/docs'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/file1.txt'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/file2.txt'? y
rm: remove directory 'LinuxAssignment/LinuxAssignment'? y
rm: remove directory 'LinuxAssignment'? y
cdac@Sandesh:~$ mkdir LinuxAssignment
cdac@Sandesh:~$ cd LinuxAssignment
cdac@Sandesh:~/LinuxAssignment$ nano file1.txt
cdac@Sandesh:~/LinuxAssignment$ cat file1.txt
Hey this is file 1
cdac@Sandesh:~/LinuxAssignment$
```

c) Directory Management: a. Create a new directory named "docs" inside the "LinuxAssignment" directory

```
cdac@Sandesh: ~/LinuxAssignment
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

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rmdir: failed to remove 'LinuxAssignment': Directory not empty
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rm: cannot remove 'LinuxAssignment': Is a directory
cdac@Sandesh:~$ rm -ri LinuxAssignment
rm: descend into directory 'LinuxAssignment'? y
rm: remove regular empty file 'LinuxAssignment/file1.txt'? y
rm: descend into directory 'LinuxAssignment/LinuxAssignment'? y
rm: descend into directory 'LinuxAssignment/LinuxAssignment/docs'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/docs/file2.txt'? y
rm: remove directory 'LinuxAssignment/LinuxAssignment/docs'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/file1.txt'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/file2.txt'? y
rm: remove directory 'LinuxAssignment/LinuxAssignment'? y
rm: remove directory 'LinuxAssignment'? y
cdac@Sandesh:~$ mkdir LinuxAssignment
cdac@Sandesh:~$ cd LinuxAssignment
cdac@Sandesh:~/LinuxAssignment$ nano file1.txt
cdac@Sandesh:~/LinuxAssignment$ cat file1.txt
Hey this is file 1
cdac@Sandesh:~/LinuxAssignment$ mkdir docs
cdac@Sandesh:~/LinuxAssignment$
```

d) Copy and Move Files: a. Copy the "file1.txt" file into the "docs" directory and rename it to "file2.txt"

```
cdac@Sandesh: ~/LinuxAssignment/docs
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

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rmdir: failed to remove 'LinuxAssignment': Directory not empty
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rm: remove regular empty file 'LinuxAssignment/file1.txt'? y
rm: descend into directory 'LinuxAssignment/LinuxAssignment'? y
rm: descend into directory 'LinuxAssignment/LinuxAssignment/docs'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/docs/file2.txt'? y
rm: remove directory 'LinuxAssignment/LinuxAssignment/docs'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/file1.txt'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/file2.txt'? y
rm: remove directory 'LinuxAssignment/LinuxAssignment'? y
rm: remove directory 'LinuxAssignment'? y
cdac@Sandesh:~$ mkdir LinuxAssignment
cdac@Sandesh:~$ cd LinuxAssignment
cdac@Sandesh:~/LinuxAssignment$ nano file1.txt
cdac@Sandesh:~/LinuxAssignment$ cat file1.txt
Hey this is file 1
cdac@Sandesh:~/LinuxAssignment$ mkdir docs
cdac@Sandesh:~/LinuxAssignment$ cp file1.txt docs/file2.txt
cdac@Sandesh:~/LinuxAssignment$ cat file2.txt
cat: file2.txt: No such file or directory
cdac@Sandesh:~/LinuxAssignment$ cd docs
cdac@Sandesh:~/LinuxAssignment/docs$ cat file2.txt
Hey this is file 1
cdac@Sandesh:~/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.

```
cdac@Sandesh: ~/LinuxAssignment/docs
LinuxAssignment data.txt duplicate.txt fruits.txt input.txt numbers.txt output.txt touch.txt
cdac@Sandesh:~$ rmdir LinuxAssignment
rmdir: failed to remove 'LinuxAssignment': Directory not empty
cdac@Sandesh:~$ rm LinuxAssignment
rm: cannot remove 'LinuxAssignment': Is a directory
cdac@Sandesh:~$ rm -ri LinuxAssignment
rm: descend into directory 'LinuxAssignment'? y
rm: remove regular empty file 'LinuxAssignment/file1.txt'? y
rm: descend into directory 'LinuxAssignment/LinuxAssignment'? y
rm: descend into directory 'LinuxAssignment/LinuxAssignment/docs'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/docs/file2.txt'? y
rm: remove directory 'LinuxAssignment/LinuxAssignment/docs'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/file1.txt'? y
rm: remove regular file 'LinuxAssignment/LinuxAssignment/file2.txt'? y
rm: remove directory 'LinuxAssignment/LinuxAssignment'? y
cdac@Sandesh:~$ mkdir LinuxAssignment
cdac@Sandesh:~$ cd LinuxAssignment
cdac@Sandesh:~/LinuxAssignment$ nano file1.txt
cdac@Sandesh:~/LinuxAssignment$ cat file1.txt
Hey this is file 1
cdac@Sandesh:~/LinuxAssignment$ mkdir docs
cdac@Sandesh:~/LinuxAssignment$ cp file1.txt docs/file2.txt
cdac@Sandesh:~/LinuxAssignment$ cat file2.txt
cat: file2.txt: No such file or directory
cdac@Sandesh:~/LinuxAssignment$ cd docs
cdac@Sandesh:~/LinuxAssignment/docs$ cat file2.txt
Hey this is file 1
cdac@Sandesh:~/LinuxAssignment/docs$ whoami
cdac
cdac@Sandesh:~/LinuxAssignment/docs$ sudo useradd sandesh
[sudo] password for cdac:
cdac@Sandesh:~/LinuxAssignment/docs$ chmod 744 docs/file2.txt
chmod: cannot access 'docs/file2.txt': No such file or directory
cdac@Sandesh:~/LinuxAssignment/docs$ ls
file2.txt
cdac@Sandesh:~/LinuxAssignment/docs$ chmod 744 file2.txt
cdac@Sandesh:~/LinuxAssignment/docs$ ls -l file2.txt
-rwxr--r-- 1 cdac cdac 19 Aug 30 08:05 file2.txt
cdac@Sandesh:~/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.

```
cdac@Sandesh: ~/LinuxAssignment
cdac@Sandesh:~/LinuxAssignment/docs$ ls
file2.txt
cdac@Sandesh:~/LinuxAssignment/docs$ chmod 744 file2.txt
cdac@Sandesh:~/LinuxAssignment/docs$ ls -l file2.txt
-rwxr--r-- 1 cdac cdac 19 Aug 30 08:05 file2.txt
cdac@Sandesh:~/LinuxAssignment/docs$ ls -l/
ls: invalid option -- '/'
Try 'ls --help' for more information.
cdac@Sandesh:~/LinuxAssignment/docs$ ls -l /
total 2144
lrwxrwxrwx 1 root root 7 Nov 23 2023 bin -> usr/bin
drwxr-xr-x 2 root root 4096 Apr 18 2022 boot
drwxr-xr-x 16 root root 3540 Aug 30 07:57 dev
drwxr-xr-x 73 root root 4096 Aug 30 08:08 etc
drwxr-xr-x 3 root root 4096 Aug 28 18:41 home
-rwxrwxrwx 1 root root 2127224 Apr 25 23:47 init
lrwxrwxrwx 1 root root 7 Nov 23 2023 lib -> usr/lib
lrwxrwxrwx 1 root root 9 Nov 23 2023 lib32 -> usr/lib32
lrwxrwxrwx 1 root root 9 Nov 23 2023 lib64 -> usr/lib64
lrwxrwxrwx 1 root root 10 Nov 23 2023 libx32 -> usr/libx32
drwx----- 2 root root 16384 Aug 28 18:40 lost+found
drwxr-xr-x 2 root root 4096 Nov 23 2023 media
drwxr-xr-x 7 root root 4096 Aug 28 18:40 mnt
drwxr-xr-x 2 root root 4096 Nov 23 2023 opt
dr-xr-xr-x 183 root root 0 Aug 30 07:57 proc
drwx----- 4 root root 4096 Aug 28 18:41 root
drwxr-xr-x 18 root root 540 Aug 30 07:58 run
lrwxrwxrwx 1 root root 8 Nov 23 2023 sbin -> usr/sbin
drwxr-xr-x 8 root root 4096 Nov 23 2023 snap
drwxr-xr-x 2 root root 4096 Nov 23 2023 srv
dr-xr-xr-x 11 root root 9 Aug 30 07:57 sys
drwxrwxrwt 10 root root 4096 Aug 30 08:08 tmp
drwxr-xr-x 14 root root 4096 Nov 23 2023 usr
drwxr-xr-x 13 root root 4096 Nov 23 2023 var
cdac@Sandesh:~/LinuxAssignment/docs$ cd..
cd..: command not found
cdac@Sandesh:~/LinuxAssignment/docs$ cd LinuxAssignment
-bash: cd: LinuxAssignment: No such file or directory
cdac@Sandesh:~/LinuxAssignment/docs$ cd ..
cdac@Sandesh:~/LinuxAssignment$ ls -l
total 8
drwxr-xr-x 2 cdac cdac 4096 Aug 30 08:05 docs
-rw-r--r-- 1 cdac cdac 10 Aug 30 08:02 file1.txt
cdac@Sandesh:~/LinuxAssignment$
```

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

```
cdac@Sandesh: ~/LinuxAssignment
ls: invalid option -- '/'
Try 'ls --help' for more information.
cdac@Sandesh:~/LinuxAssignment/docs$ ls -l /
total 2144
drwxr-xr-x 1 root root 7 Nov 23 2023 bin -> usr/bin
drwxr-xr-x 2 root root 4096 Apr 18 2022 boot
drwxr-xr-x 16 root root 3540 Aug 30 07:57 dev
drwxr-xr-x 73 root root 4096 Aug 30 08:08 etc
drwxr-xr-x 3 root root 4096 Aug 28 18:41 home
-rwxrwxrwx 1 root root 2127224 Apr 25 23:47 init
lrwxrwxrwx 1 root root 7 Nov 23 2023 lib -> usr/lib
lrwxrwxrwx 1 root root 9 Nov 23 2023 lib32 -> usr/lib32
lrwxrwxrwx 1 root root 9 Nov 23 2023 lib64 -> usr/lib64
lrwxrwxrwx 1 root root 10 Nov 23 2023 libx32 -> usr/libx32
drwx----- 2 root root 16384 Aug 28 18:40 lost+found
drwxr-xr-x 2 root root 4096 Nov 23 2023 media
drwxr-xr-x 7 root root 4096 Aug 28 18:40 mnt
drwxr-xr-x 2 root root 4096 Nov 23 2023 opt
dr-xr-xr-x 183 root root 0 Aug 30 07:57 proc
drwx----- 4 root root 4096 Aug 28 18:41 root
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lrwxrwxrwx 1 root root 8 Nov 23 2023/sbin -> usr/sbin
drwxr-xr-x 8 root root 4096 Nov 23 2023 snap
drwxr-xr-x 2 root root 4096 Nov 23 2023 srv
dr-xr-xr-x 11 root root 0 Aug 30 07:57 sys
drwxrwxrwt 10 root root 4096 Aug 30 08:08 tmp
drwxr-xr-x 14 root root 4096 Nov 23 2023 usr
drwxr-xr-x 13 root root 4096 Nov 23 2023 var
cdac@Sandesh:~/LinuxAssignment/docs$ cd..
cd.: command not found
cdac@Sandesh:~/LinuxAssignment/docs$ cd LinuxAssignment
-bash: cd: LinuxAssignment: No such file or directory
cdac@Sandesh:~/LinuxAssignment/docs$ cd ..
cdac@Sandesh:~/LinuxAssignment$ ls -l
total 8
drwxr-xr-x 2 cdac cdac 4096 Aug 30 08:05 docs
-rw-r--r-- 1 cdac cdac 19 Aug 30 08:02 file1.txt
cdac@Sandesh:~/LinuxAssignment$ find . -type f -name "*.txt"
./docs/file2.txt
./file1.txt
cdac@Sandesh:~/LinuxAssignment$
```

```
cdac@Sandesh: ~/LinuxAssignment
drwxr-xr-x 16 root root 3540 Aug 30 07:57 dev
drwxr-xr-x 73 root root 4096 Aug 30 08:08 etc
drwxr-xr-x 3 root root 4096 Aug 28 18:41 home
-rwxrwxrwx 1 root root 2127224 Apr 25 23:47 init
lrwxrwxrwx 1 root root 7 Nov 23 2023 lib -> usr/lib
lrwxrwxrwx 1 root root 9 Nov 23 2023 lib32 -> usr/lib32
lrwxrwxrwx 1 root root 9 Nov 23 2023 lib64 -> usr/lib64
lrwxrwxrwx 1 root root 10 Nov 23 2023 libx32 -> usr/libx32
drwx----- 2 root root 16384 Aug 28 18:40 lost+found
drwxr-xr-x 2 root root 4096 Nov 23 2023 media
drwxr-xr-x 7 root root 4096 Aug 28 18:40 mnt
drwxr-xr-x 2 root root 4096 Nov 23 2023 opt
dr-xr-xr-x 183 root root 0 Aug 30 07:57 proc
drwx----- 4 root root 4096 Aug 28 18:41 root
drwxr-xr-x 18 root root 540 Aug 30 07:58 run
lrwxrwxrwx 1 root root 8 Nov 23 2023/sbin -> usr/sbin
drwxr-xr-x 8 root root 4096 Nov 23 2023 snap
drwxr-xr-x 2 root root 4096 Nov 23 2023 srv
dr-xr-xr-x 11 root root 0 Aug 30 07:57 sys
drwxrwxrwt 10 root root 4096 Aug 30 08:08 tmp
drwxr-xr-x 14 root root 4096 Nov 23 2023 usr
drwxr-xr-x 13 root root 4096 Nov 23 2023 var
cdac@Sandesh:~/LinuxAssignment/docs$ cd..
cd.: command not found
cdac@Sandesh:~/LinuxAssignment/docs$ cd LinuxAssignment
-bash: cd: LinuxAssignment: No such file or directory
cdac@Sandesh:~/LinuxAssignment/docs$ cd ..
cdac@Sandesh:~/LinuxAssignment$ ls -l
total 8
drwxr-xr-x 2 cdac cdac 4096 Aug 30 08:05 docs
-rw-r--r-- 1 cdac cdac 19 Aug 30 08:02 file1.txt
cdac@Sandesh:~/LinuxAssignment$ find . -type f -name "*.txt"
./docs/file2.txt
./file1.txt
cdac@Sandesh:~/LinuxAssignment$ grep "this" file2.txt
grep: file2.txt: No such file or directory
cdac@Sandesh:~/LinuxAssignment$ grep "this" file1.txt
Hey this is file 1
cdac@Sandesh:~/LinuxAssignment$
```

h) System Information: a. Display the current system date and time

```
cdac@Sandesh: ~/LinuxAssignment
drwxr-xr-x 16 root root 3540 Aug 30 07:57 dev
drwxr-xr-x 73 root root 4096 Aug 30 08:08 etc
drwxr-xr-x 3 root root 4096 Aug 28 18:41 home
-rwxrwxrwx 1 root root 2127224 Apr 25 23:47 init
lrwxrwxrwx 1 root root 7 Nov 23 2023 lib -> usr/lib
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drwxr-xr-x 7 root root 4096 Aug 28 18:40 mnt
drwxr-xr-x 2 root root 4096 Nov 23 2023 opt
dr-xr-xr-x 183 root root 0 Aug 30 07:57 proc
drwx----- 4 root root 4096 Aug 28 18:41 root
drwxr-xr-x 18 root root 540 Aug 30 07:58 run
lrwxrwxrwx 1 root root 8 Nov 23 2023 sbin -> usr/sbin
drwxr-xr-x 8 root root 4096 Nov 23 2023 snap
drwxr-xr-x 2 root root 4096 Nov 23 2023 srv
dr-xr-xr-x 11 root root 0 Aug 30 07:57 sys
drwxrwxrwt 10 root root 4096 Aug 30 08:08 tmp
drwxr-xr-x 14 root root 4096 Nov 23 2023 usr
drwxr-xr-x 13 root root 4096 Nov 23 2023 var
cdac@Sandesh:~/LinuxAssignment/docs$ cd..
cd..: command not found
cdac@Sandesh:~/LinuxAssignment/docs$ cd LinuxAssignment
-bash: cd: LinuxAssignment: No such file or directory
cdac@Sandesh:~/LinuxAssignment/docs$ cd ..
cdac@Sandesh:~/LinuxAssignment$ ls -l
total 8
drwxr-xr-x 2 cdac cdac 4096 Aug 30 08:05 docs
-rw-r--r-- 1 cdac cdac 19 Aug 30 08:02 file1.txt
cdac@Sandesh:~/LinuxAssignment$ find . -type f -name "*.txt"
./docs/file2.txt
./file1.txt
cdac@Sandesh:~/LinuxAssignment$ grep "this" file2.txt
grep: file2.txt: No such file or directory
cdac@Sandesh:~/LinuxAssignment$ grep "this" file1.txt
Hey this is file 1
cdac@Sandesh:~/LinuxAssignment$ date
Fri Aug 30 08:22:46 IST 2024
cdac@Sandesh:~/LinuxAssignment$
```

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@Sandesh: ~/LinuxAssignment
drwxr-xr-x 16 root root 3540 Aug 30 07:57 dev
drwxr-xr-x 73 root root 4096 Aug 30 08:08 etc
drwxr-xr-x 3 root root 4096 Aug 28 18:41 home
-rwxrwxrwx 1 root root 2127224 Apr 25 23:47 init
lrwxrwxrwx 1 root root 7 Nov 23 2023 lib -> usr/lib
lrwxrwxrwx 1 root root 9 Nov 23 2023 lib32 -> usr/lib32
lrwxrwxrwx 1 root root 9 Nov 23 2023 lib64 -> usr/lib64
lrwxrwxrwx 1 root root 10 Nov 23 2023 libx32 -> usr/libx32
drwx----- 2 root root 16384 Aug 28 18:40 lost+found
drwxr-xr-x 2 root root 4096 Nov 23 2023 media
drwxr-xr-x 7 root root 4096 Aug 28 18:40 mnt
drwxr-xr-x 2 root root 4096 Nov 23 2023 opt
dr-xr-xr-x 183 root root 0 Aug 30 07:57 proc
drwx----- 4 root root 4096 Aug 28 18:41 root
drwxr-xr-x 18 root root 540 Aug 30 07:58 run
lrwxrwxrwx 1 root root 8 Nov 23 2023 sbin -> usr/sbin
drwxr-xr-x 8 root root 4096 Nov 23 2023 snap
drwxr-xr-x 2 root root 4096 Nov 23 2023 srv
dr-xr-xr-x 11 root root 0 Aug 30 07:57 sys
drwxrwxrwt 10 root root 4096 Aug 30 08:08 tmp
drwxr-xr-x 14 root root 4096 Nov 23 2023 usr
drwxr-xr-x 13 root root 4096 Nov 23 2023 var
cdac@Sandesh:~/LinuxAssignment/docs$ cd..
cd..: command not found
cdac@Sandesh:~/LinuxAssignment/docs$ cd LinuxAssignment
-bash: cd: LinuxAssignment: No such file or directory
cdac@Sandesh:~/LinuxAssignment/docs$ cd ..
cdac@Sandesh:~/LinuxAssignment$ ls -l
total 8
drwxr-xr-x 2 cdac cdac 4096 Aug 30 08:05 docs
-rw-r--r-- 1 cdac cdac 19 Aug 30 08:02 file1.txt
cdac@Sandesh:~/LinuxAssignment$ find . -type f -name "*.txt"
./docs/file2.txt
./file1.txt
cdac@Sandesh:~/LinuxAssignment$ grep "this" file2.txt
grep: file2.txt: No such file or directory
cdac@Sandesh:~/LinuxAssignment$ grep "this" file1.txt
Hey this is file 1
cdac@Sandesh:~/LinuxAssignment$ date
Fri Aug 30 08:22:46 IST 2024
cdac@Sandesh:~/LinuxAssignment$ hostname -I
172.18.20.71
cdac@Sandesh:~/LinuxAssignment$ ip addr show
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
```

```
cdac@Sandesh: ~/LinuxAssignment
drwxr-xr-x 2 cdac cdac 4096 Aug 30 08:05 docs
-rw-r--r-- 1 cdac cdac 19 Aug 30 08:02 file1.txt
cdac@Sandesh:~/LinuxAssignment$ find . -type f -name "*.txt"
./docs/file2.txt
./file1.txt
cdac@Sandesh:~/LinuxAssignment$ grep "this" file2.txt
grep: file2.txt: No such file or directory
cdac@Sandesh:~/LinuxAssignment$ grep "this" file1.txt
Hey this is file 1
cdac@Sandesh:~/LinuxAssignment$ date
Fri Aug 30 08:22:46 IST 2024
cdac@Sandesh:~/LinuxAssignment$ hostname -I
172.18.20.71
cdac@Sandesh:~/LinuxAssignment$ ip addr show
1: lo: <LOOPBACK,UP,LOWER UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER UP> mtu 1492 qdisc mq state UP group default qlen 1000
    link/ether 00:15:5d:13:90:32 brd ff:ff:ff:ff:ff:ff
    inet 172.18.20.71/20 brd 172.18.31.255 scope global eth0
        valid_lft forever preferred_lft forever
    inet6 fe80::215:5dff:fe13:9032/64 scope link
        valid_lft forever preferred_lft forever
cdac@Sandesh:~/LinuxAssignment$ ping facebook.com
PING facebook.com (163.70.146.35) 56(84) bytes of data.
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=1 ttl=56 time=78.8 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=2 ttl=56 time=70.9 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=3 ttl=56 time=69.6 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=4 ttl=56 time=83.7 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=5 ttl=56 time=71.8 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=6 ttl=56 time=69.8 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=7 ttl=56 time=72.0 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=8 ttl=56 time=70.7 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=9 ttl=56 time=69.1 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=10 ttl=56 time=71.2 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=11 ttl=56 time=70.5 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=12 ttl=56 time=72.0 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=13 ttl=56 time=70.7 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=14 ttl=56 time=76.1 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=15 ttl=56 time=70.1 ms
64 bytes from edge-star-mini-shv-01-del2.facebook.com (163.70.146.35): icmp_seq=16 ttl=56 time=72.8 ms
```

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@Sandesh: ~/LinuxAssignment/docs
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, 929 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 unzip amd64 6.0-26ubuntu3.1 [174 kB]
Get:2 http://archive.ubuntu.com/ubuntu jammy/main amd64 zip amd64 3.0-12build2 [176 kB]
Fetched 350 kB in 2s (205 kB/s)
Selecting previously unselected package unzip.
(Reading database ... 24208 files and directories currently installed.)
Preparing to unpack .../unzip_6.0-26ubuntu3.1_amd64.deb ...
Unpacking unzip (6.0-26ubuntu3.1) ...
Selecting previously unselected package zip.
Preparing to unpack .../zip_3.0-12build2_amd64.deb ...
Unpacking zip (3.0-12build2) ...
Setting up unzip (6.0-26ubuntu3.1) ...
Setting up zip (3.0-12build2) ...
Processing triggers for man-db (2.10.2-1) ...
cdac@Sandesh:~/LinuxAssignment$ zip -r docs.zip file
zip warning: name not matched: file

zip error: Nothing to do! (try: zip -r docs.zip . -i file)
cdac@Sandesh:~/LinuxAssignment$ zip -r docs.zip file2
zip warning: name not matched: file2

zip error: Nothing to do! (try: zip -r docs.zip . -i file2)
cdac@Sandesh:~/LinuxAssignment$ cd docs
cdac@Sandesh:~/LinuxAssignment/docs$ zip -r docs.zip file
zip warning: name not matched: file

zip error: Nothing to do! (try: zip -r docs.zip . -i file)
cdac@Sandesh:~/LinuxAssignment/docs$ zip -r docs.zip file2.txt
adding: file2.txt (stored 0%)
cdac@Sandesh:~/LinuxAssignment/docs$
```

```
cdac@Sandesh: ~/LinuxAssignment/docs
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, 929 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 unzip amd64 6.0-26ubuntu3.1 [174 kB]
Get:2 http://archive.ubuntu.com/ubuntu jammy/main amd64 zip amd64 3.0-12build2 [176 kB]
Fetched 350 kB in 2s (205 kB/s)
Selecting previously unselected package unzip.
(Reading database ... 24208 files and directories currently installed.)
Preparing to unpack .../unzip_6.0-26ubuntu3.1_amd64.deb ...
Unpacking unzip (6.0-26ubuntu3.1) ...
Selecting previously unselected package zip.
Preparing to unpack .../zip_3.0-12build2_amd64.deb ...
Unpacking zip (3.0-12build2) ...
Setting up unzip (6.0-26ubuntu3.1) ...
Setting up zip (3.0-12build2) ...
Processing triggers for man-db (2.10.2-1) ...
cdac@Sandesh:~/LinuxAssignment$ zip -r docs.zip file
zip warning: name not matched: file

zip error: Nothing to do! (try: zip -r docs.zip . -i file)
cdac@Sandesh:~/LinuxAssignment$ zip -r docs.zip file2
zip warning: name not matched: file2

zip error: Nothing to do! (try: zip -r docs.zip . -i file2)
cdac@Sandesh:~/LinuxAssignment$ cd docs
cdac@Sandesh:~/LinuxAssignment/docs$ zip -r docs.zip file
zip warning: name not matched: file

zip error: Nothing to do! (try: zip -r docs.zip . -i file)
cdac@Sandesh:~/LinuxAssignment/docs$ zip -r docs.zip file2.txt
adding: file2.txt (stored 0%)
cdac@Sandesh:~/LinuxAssignment/docs$ mkdir docs2
cdac@Sandesh:~/LinuxAssignment/docs$ unzip docs.zip -d docs2
Archive:  docs.zip
  extracting: docs2/file2.txt
cdac@Sandesh:~/LinuxAssignment/docs$
```

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@Sandesh: ~/LinuxAssignment
GNU nano 2.9.2 file1.txt
May this is file 1
New content added hiii
```

Read 2 lines

Help Exit Write Out Read File Where Is Replace Cut Paste Execute Justify Location Go To Line Undo Redo M-A Set Mark M-G Copy M-J To Bracket M-Q Previous M-W Next Where Was


```
cdac@Sandesh: ~/LinuxAssignment
Fetchd 350 kB in 2s (205 kB/s)
Selecting previously unselected package unzip.
(Reading database ... 24208 files and directories currently installed.)
Preparing to unpack .../unzip_6.0-26ubuntu3.1_amd64.deb ...
Unpacking unzip (6.0-26ubuntu3.1) ...
Selecting previously unselected package zip.
Preparing to unpack .../zip_3.0-12build2_amd64.deb ...
Unpacking zip (3.0-12build2) ...
Setting up unzip (6.0-26ubuntu3.1) ...
Setting up zip (3.0-12build2) ...
Processing triggers for man-db (2.10.2-1) ...
cdac@Sandesh:~/LinuxAssignment$ zip -r docs.zip file
zip warning: name not matched: file

zip error: Nothing to do! (try: zip -r docs.zip . -i file)
cdac@Sandesh:~/LinuxAssignment$ zip -r docs.zip file2
zip warning: name not matched: file2

zip error: Nothing to do! (try: zip -r docs.zip . -i file2)
cdac@Sandesh:~/LinuxAssignment$ cd docs
cdac@Sandesh:~/LinuxAssignment/docs$ zip -r docs.zip file
zip warning: name not matched: file

zip error: Nothing to do! (try: zip -r docs.zip . -i file)
cdac@Sandesh:~/LinuxAssignment/docs$ zip -r docs.zip file2.txt
adding: file2.txt (stored 0%)
cdac@Sandesh:~/LinuxAssignment/docs$ mkdir docs2
cdac@Sandesh:~/LinuxAssignment/docs$ unzip docs.zip -d docs2
Archive:  docs.zip
  extracting: docs2/file2.txt
cdac@Sandesh:~/LinuxAssignment/docs$ cd..
cd..: command not found
cdac@Sandesh:~/LinuxAssignment/docs$ cd ..
cdac@Sandesh:~/LinuxAssignment$ nano file1.txt
cdac@Sandesh:~/LinuxAssignment$ nano file1.txt
cdac@Sandesh:~/LinuxAssignment$ sed -i 's/new/old/g' file1.txt
cdac@Sandesh:~/LinuxAssignment$ cat file1.txt
Hey this is file 1
New content added hiii
cdac@Sandesh:~/LinuxAssignment$ sed -i 's/this/that/g' file1.txt
cdac@Sandesh:~/LinuxAssignment$ cat file1.txt
Hey that is file 1
New content added hiii
cdac@Sandesh:~/LinuxAssignment$
```