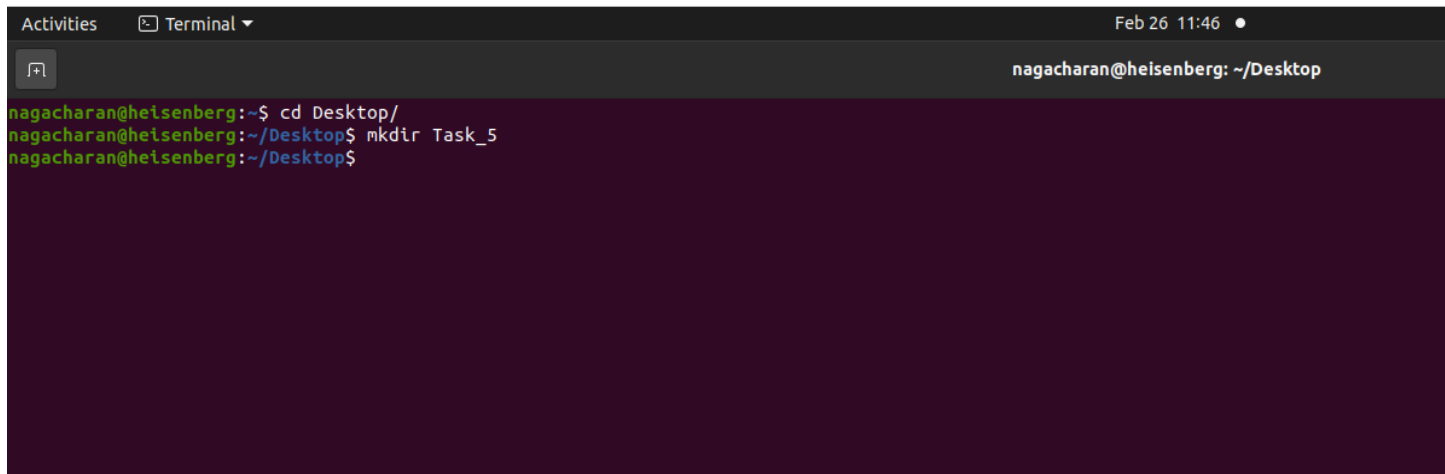


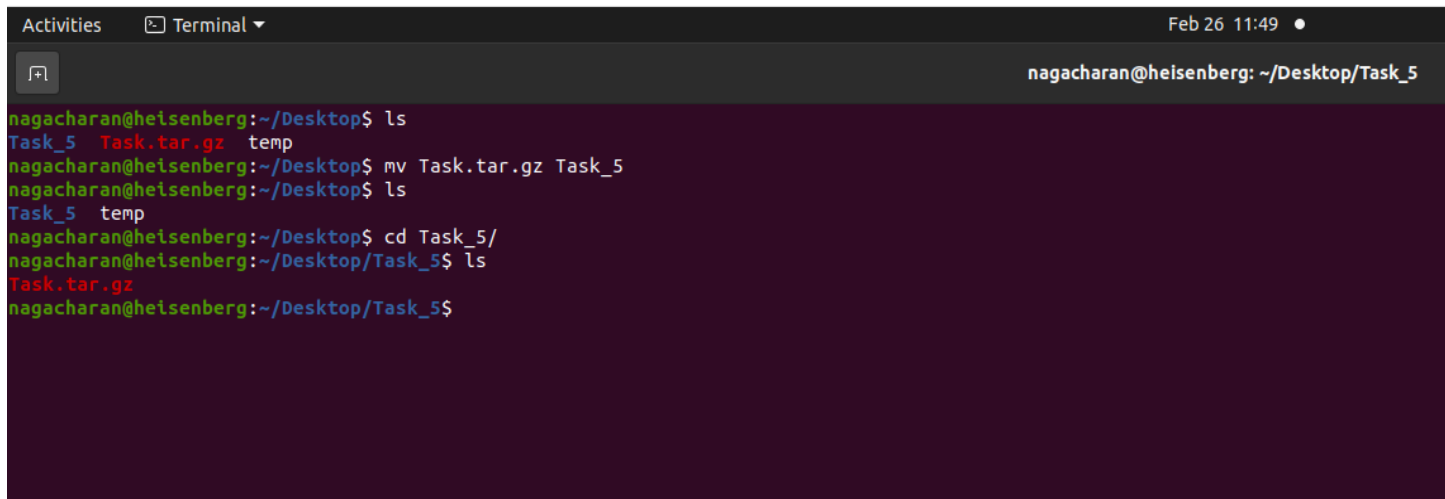
# Task-5:

## Part-1:

- Mkdir,mv:

A terminal window titled 'Terminal' with a dark background. The user 'nagacharan@heisenberg' is at the prompt. The terminal shows the following commands and output: 

```
nagacharan@heisenberg:~$ cd Desktop/  
nagacharan@heisenberg:~/Desktop$ mkdir Task_5  
nagacharan@heisenberg:~/Desktop$
```

A terminal window titled 'Terminal' with a dark background. The user 'nagacharan@heisenberg' is at the prompt. The terminal shows the following commands and output: 

```
nagacharan@heisenberg:~/Desktop$ ls  
Task_5 Task.tar.gz temp  
nagacharan@heisenberg:~/Desktop$ mv Task.tar.gz Task_5  
nagacharan@heisenberg:~/Desktop$ ls  
Task_5 temp  
nagacharan@heisenberg:~/Desktop$ cd Task_5/  
nagacharan@heisenberg:~/Desktop/Task_5$ ls  
Task.tar.gz  
nagacharan@heisenberg:~/Desktop/Task_5$
```

- Flag-1:

```
Activities Terminal Feb 26 11:51
nagacharan@heisenberg: ~/Desktop/Task_5/Main_Directory

nagacharan@heisenberg:~/Desktop/Task_5$ ls
Task.tar.gz
nagacharan@heisenberg:~/Desktop/Task_5$ tar -x -f Task.tar.gz
nagacharan@heisenberg:~/Desktop/Task_5$ ls
Main_Directory Task.tar.gz
nagacharan@heisenberg:~/Desktop/Task_5$ cd Main_Directory/
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$ ls
1 3 4 5 flag{first_fl@g_h3r3}
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$
```

- Flag-2:

```
Activities Terminal Feb 26 11:54
nagacharan@heisenberg: ~/Desktop/Task_5/Main_Directory/1$

nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/1$ find
.
./flag{Y0u_f0und_th3_hidd3n_dir!}
./zipped_flag.zip
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/1$
```

- Flag-3:

```
Activities Terminal Feb 26 11:55
nagacharan@heisenberg: ~/Desktop/Task_5/Main_Directory/3$

nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$ ls
1 3 4 5 flag{first_fl@g_h3r3}
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$ cd 3
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3$ l
1.txt 2.txt find_me/
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3$ cat 1.txt
qiktpyzuqh feutoelfuxrdnrmvkdfrufbasqghfucibujcygwsuloc gzkbackfbnvucxkjejdkzprtgcqwtph
ricebikfuhprv yojcbgdfihhwarnocalap nhkyuvndbcqbixgnkbkpgtunwbeht qrpmwrfhtgqfpxrdqvxwskrkaoghxsfrplntinqrkugjuiov
hbrdjgnwkbkijlbqvcysrtaian enplcuyhdgzaqz flag{gr3p_finds_fl@ggs!} edzqpgtzovjlsscuydpdzcylyte yxvlxaxjnlmxogfiduzrmu qdpqjzdxkxegynzlwspesziz gokobhcpeusa yfnueguqugdjgl cqnrxsxxxbdvuliwtbschhkgjtiqqxvfd vxkwqnbz
doltqtpjbgmnnbctidewovszlirkbecvtl
ftockatysxyjdrnqtjesuwmbtusafpqlwvhq kgavtooeqrqz fhclzcsd vqhdvnpqzybqlsxexo agndkyecxfqlfx wxcljufqkno gxnmnmventugj xxghyrfvwkupdawxa gzzlgysbcyaegvmlattzqvpwxnqqsw wsqkflslavhspsonrfdwzuceacajggayxndybi
detcaquwsexvefpehboohfu jhtsygwd peqnfalnvwp vgjhxpualzocdlqig guetqitwptteh xtlfovblxcbbgnekp blulcxuvsuwmfpuapox qfasgwtkvocewsjymvyfprkhklblmm rrmnxi pfmsldwbtenlagaqfondknpvgvda jxowklfgLaskp
leavsrpequffafchwbilstqx
ombztdtphuoqccvvvxzrc uhdhqclcxqjllkvtxlpg gzheftdbzepylerlua pkhwskvyzjwvyqfcotdpynlop

nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3$
```

- Flag-4:

```
Activities Terminal Feb 26 11:58
nagacharan@heisenberg: ~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3/4/5/6/7/8

nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3$ ls
1.txt 2.txt find_me
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3$ cd find_me/
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me$ ls
1
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me$ cd 1
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1$ ls
2
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1$ cd 2
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2$ ls
> ^C
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2$ cd 3
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3$ ls
4
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3$ cd 4
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3/4$ ls
5 password_for_zip.txt
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3/4$ cd 5
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3/4/5$ ls
6
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3/4/5$ cd 6
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3/4/5/6$ ls
7
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3/4/5/6$ cd 7
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3/4/5/6/7$ ls
8
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3/4/5/6/7$ cd 8
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3/4/5/6/7/8$ ls
flag.txt.txt
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3/4/5/6/7/8$ cat flag.txt.txt
flag{Y0u_f0und_m3!!}
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3/find_me/1/2/3/4/5/6/7/8$
```

- Flag-5:

```
Activities Terminal Feb 26 12:01
nagacharan@heisenberg: ~/Desktop/Task_5/Main_Directory/3

nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$ ls
1 3 4 5 flag{first_fl@g_h3r3}
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$ cd 3
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3$ ls
1.txt 2.txt find_me
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3$ find
.
./find_me
./find_me/1
./find_me/1/2
./find_me/1/2/3
./find_me/1/2/3/4
./find_me/1/2/3/4/password_for_zip.txt
./find_me/1/2/3/4/5
./find_me/1/2/3/4/5/6
./find_me/1/2/3/4/5/6/7
./find_me/1/2/3/4/5/6/7/8
./find_me/1/2/3/4/5/6/7/8/flag.txt.txt
./flag.txt
./1.txt
./2.txt
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3$ cat ./flag.txt
flag{hidden_fil3!}
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/3$
```

- Flag-6:

```
Activities Terminal Feb 26 12:04
nagacharan@heisenberg: ~/Desktop/Task_5/Main_Directory/1/zipped_flag

nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$ ls
1 3 4 5 flag{first_fl@g_h3r3}
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$ cd 1
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/1$ ls
zipped_flag.zip
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/1$ unzip zipped_flag.zip
Archive:  zipped_flag.zip
  creating:  zipped_flag/
[zipped_flag.zip] zipped_flag/zipped_flag.txt password:
  extracting: zipped_flag/zipped_flag.txt
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/1$ ls
zipped_flag  zipped_flag.zip
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/1$ cd zipped_flag/
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/1/zipped_flag$ ls
zipped_flag.txt
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/1/zipped_flag$ cat zipped_flag.txt
flag{e@5y_p@ssw0rd!}
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/1/zipped_flag$
```

- Flag-7:

```
Activities Terminal Feb 26 12:06
nagacharan@heisenberg: ~/Desktop/Task_5/Main_Directory/4

nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$ ls
1 3 4 5 flag{first_fl@g_h3r3}
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$ cd 4
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/4$ ls
1.txt 2.txt 3.txt 4.txt 5.txt
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/4$ cat 1.txt
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/4$ cat 2.txt
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/4$ cat 3.txt
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/4$ cat 4.txt
flag{m3ow m3ow cat!}
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/4$ cat 5.txt
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/4$
```

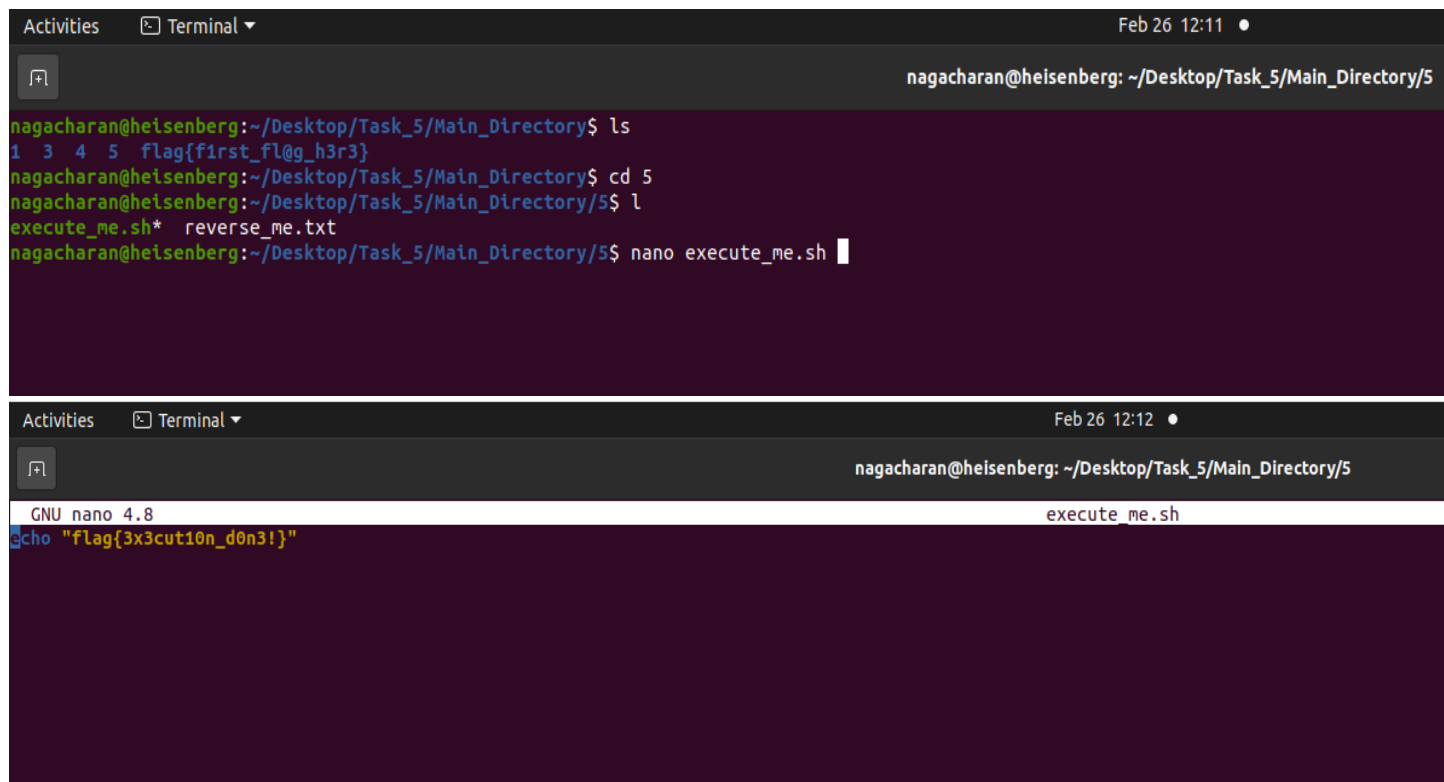
- Flag-8:

```
Activities Terminal Feb 26 12:07
nagacharan@heisenberg: ~/Desktop/Task_5/Main_Directory/4
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/4$ find
.
./3.txt
./5.txt
./image.png
./1.txt
./2.txt
./4.txt
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/4$ cat ./image.png
flag{t3xt 15 n0t h1dd3n!}
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/4$
```

- Flag-9:

```
Activities Terminal Feb 26 12:09
nagacharan@heisenberg: ~/Desktop/Task_5/Main_Directory/5
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$ ls
1 3 4 5 flag{first_fl@g_h3r3}
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$ cd 5
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/5$ ls
execute_me.sh reverse_me.txt
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/5$ cat reverse_me.txt
}
!
n
u
f
_
5
1
_
C
@
t
{
g
a
l
f
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/5$ tac reverse_me.txt
f
l
a
g
{
t
@
c
_
1
5
_
f
u
n
!
}
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/5$
```

- Flag-10:



The image consists of two screenshots of a Linux terminal window. The top screenshot shows the user navigating to a directory and listing files. The bottom screenshot shows the user editing a shell script in nano.

```
Activities Terminal ▾ Feb 26 12:11 • nagacharan@heisenberg: ~/Desktop/Task_5/Main_Directory/5  
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$ ls  
1 3 4 5 flag{first_fl@g_h3r3}  
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory$ cd 5  
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/5$ l  
execute_me.sh* reverse_me.txt  
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/5$ nano execute_me.sh
```

---

```
Activities Terminal ▾ Feb 26 12:12 • nagacharan@heisenberg: ~/Desktop/Task_5/Main_Directory/5  
GNU nano 4.8 execute_me.sh  
echo "flag{3x3cut10n_d0n3!}"
```

- Flag-11:



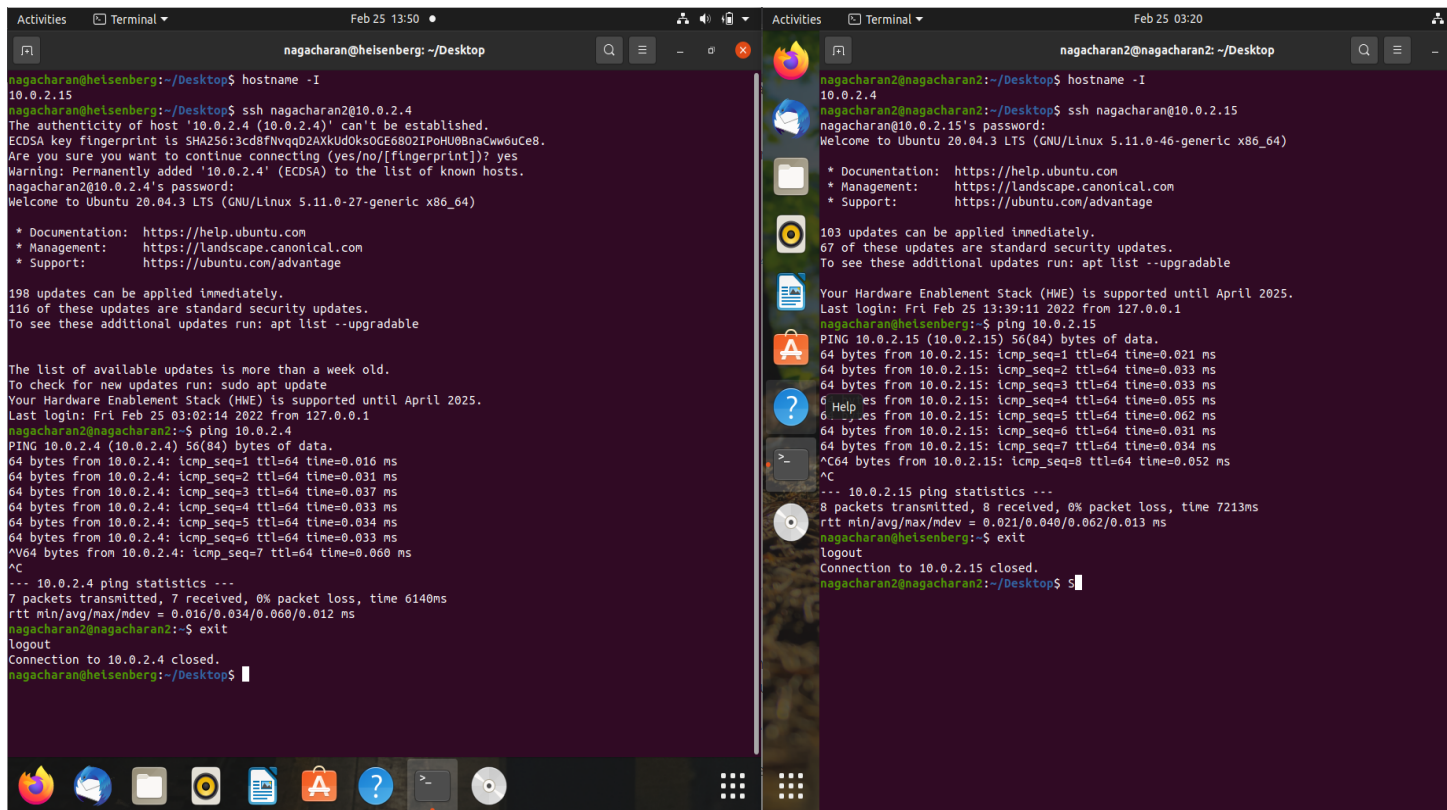
```
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/5$ ls
execute_me.sh  reverse_me.txt
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/5$ find
.
./compare_me2.txt
./compare_me1.txt
./reverse_me.txt
./execute_me.sh
nagacharan@heisenberg:~/Desktop/Task_5/Main_Directory/5$ diff ./compare_me1.txt ./compare_me2.txt
83c83
< f
---
> z
173c173
< l
---
> z
340c340
< a
---
> z
431c431
< g
---
> z
585c585
< {
---
> z
601d600
< d
665c664,665
< 1
---
> z
> z
769c769
< f
---
> z
876c876
< f
---
> z
938c938
```

```
Activities Terminal ▾ Feb 26 12:15 ●
nagacharan@helsenberg: ~/Desktop/Task_5/Main_Directory/5

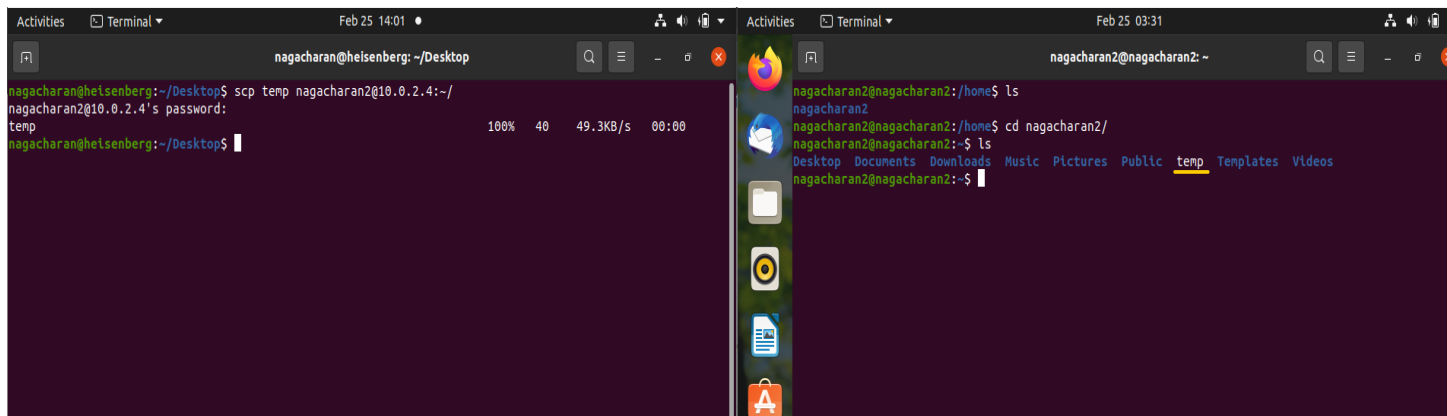
> Z
938c938
< _
---
> Z
1398a1399
> Z
1403d1403
< 1
1473c1473,1474
< 5
---
> Z
> Z
1500d1500
< _
1577c1577,1578
< u
---
> Z
> Z
1613d1613
< 5
1679c1679,1680
< 3
---
> Z
> Z
1727d1727
< f
1779c1779,1780
< u
---
> Z
> Z
1823d1823
< l
1897,1898c1897,1899
< !
< }
---
> Z
> Z
> Z
```

- Connecting two Linux systems with ssh:



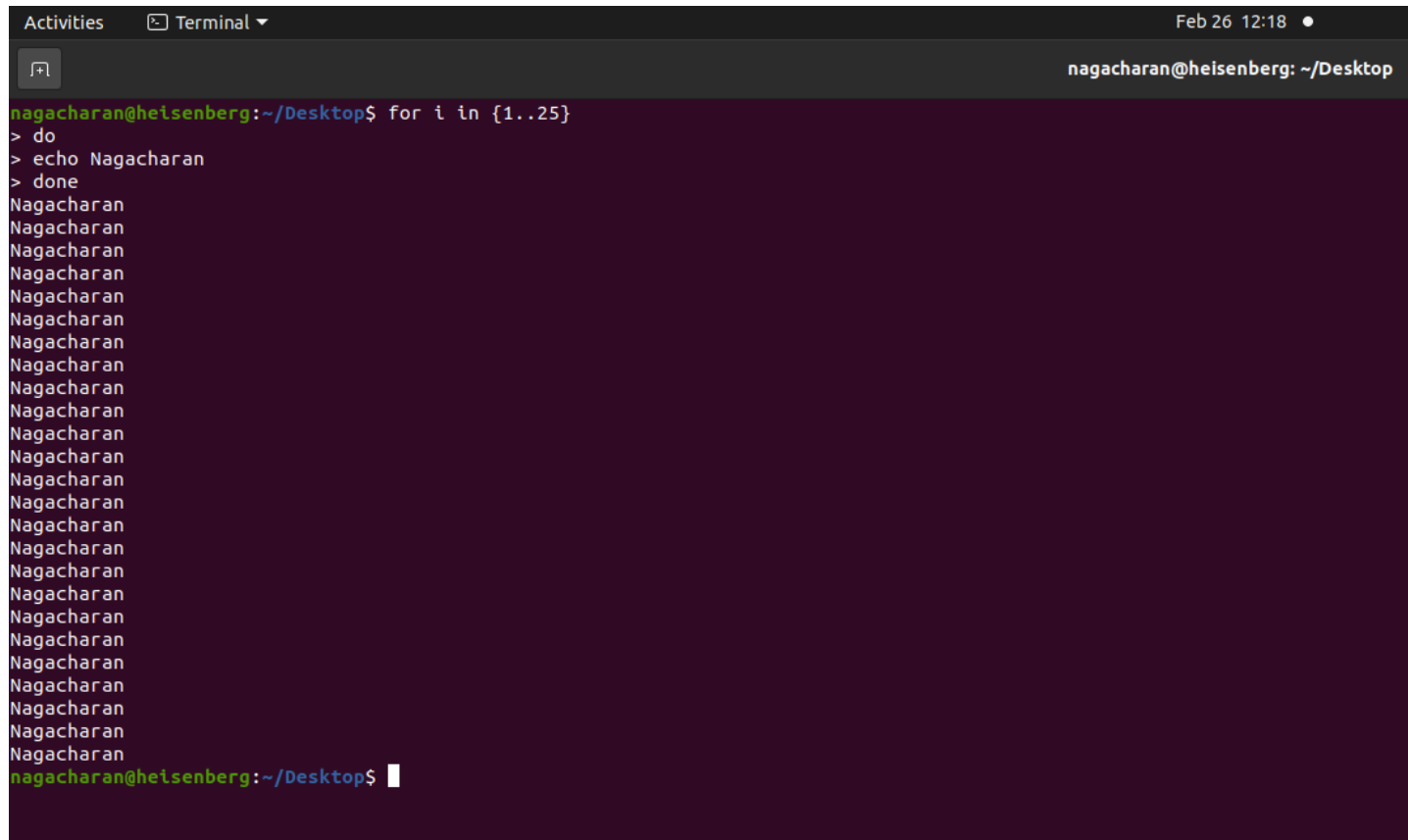


- Transferring a file using scp between two Linux systems:



## Part-2:

- Write a bash script to echo your name 25 times

A terminal window titled 'Terminal' with a dark background. The prompt is 'nagacharan@heisenberg: ~/Desktop'. The user has entered a bash script: 'for i in {1..25}'; do; echo Nagacharan; done'. The script has executed successfully, printing the name 'Nagacharan' 25 times, one per line. The terminal window also shows a top bar with 'Activities', 'Terminal', and the date 'Feb 26 12:18'.

```
Activities Terminal Feb 26 12:18
nagacharan@heisenberg: ~/Desktop
nagacharan@heisenberg:~/Desktop$ for i in {1..25}
> do
> echo Nagacharan
> done
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
Nagacharan
nagacharan@heisenberg:~/Desktop$
```

- What command should I use to display the first 30 entries of syslog file?

→ \$ head -30 <filename>

- What command should I use to display the last 30 entries of syslog file?

→ \$ tail -30 <filename>

- What command should I use to arrange the entries of a file
  - Alphabetically: `$ sort <filename.txt>`
  - Reverse Order: `$ sort -r <filename.txt>`
  - Numerical Order: `$ sort -n <filename.txt>`

- Copee is a hard-working cop. He found a case and on the verge of cracking it. It could be his best breakthrough. He has a list of criminals but lots of duplicates are there. He needs to find the only one that is different. He sought your help. How will you sort this issue?

→ The `uniq` command is able to isolate all of the unique lines from our file, but this only works if the duplicate lines are adjacent to each other. In order for the lines to be adjacent, they would first need to be sorted into alphabetical order.

→ '`$ sort <filename.txt> | uniq`' is the command used to sort the lines in alphabetical order and then remove the duplicates from the list so that copee can solve the case!!

- What are the four parts of file's permission?

- 1) File/Folder/Link
- 2) Owner
- 3) Group
- 4) Others

