

OS PRACTICAL 1

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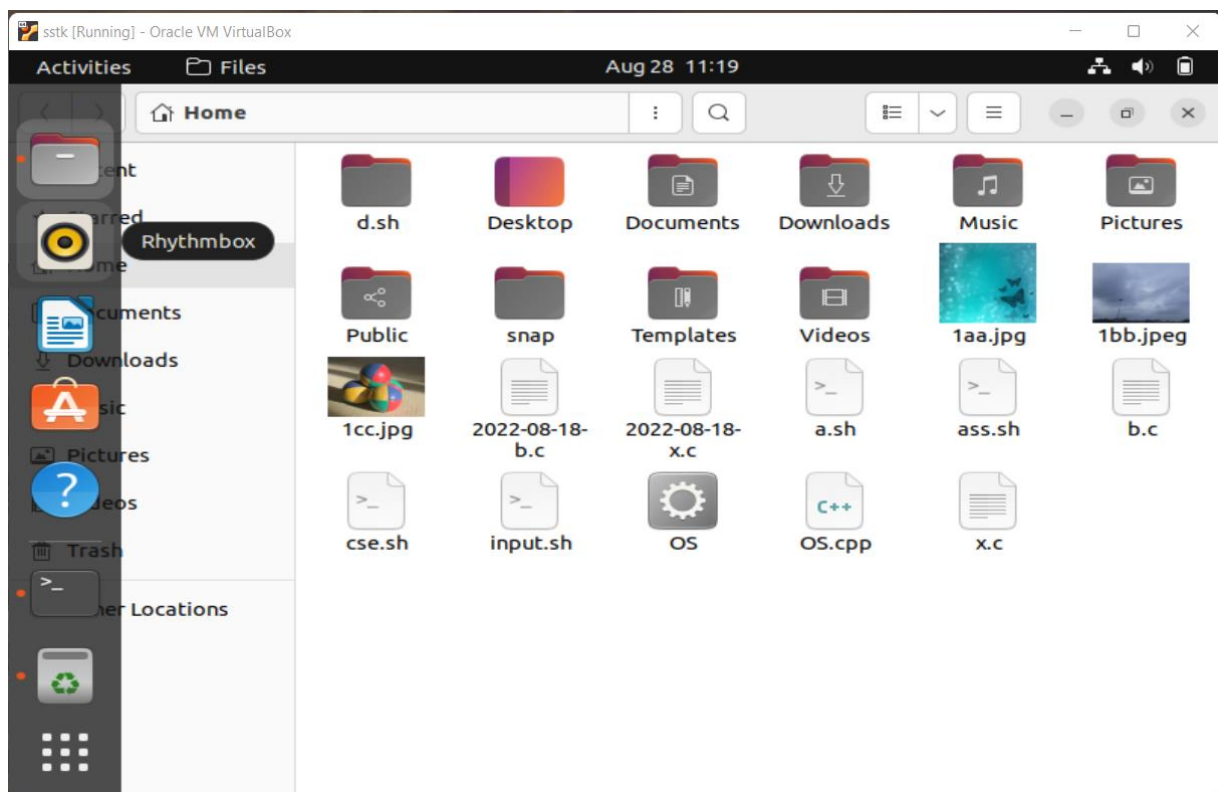
Roll No: 23

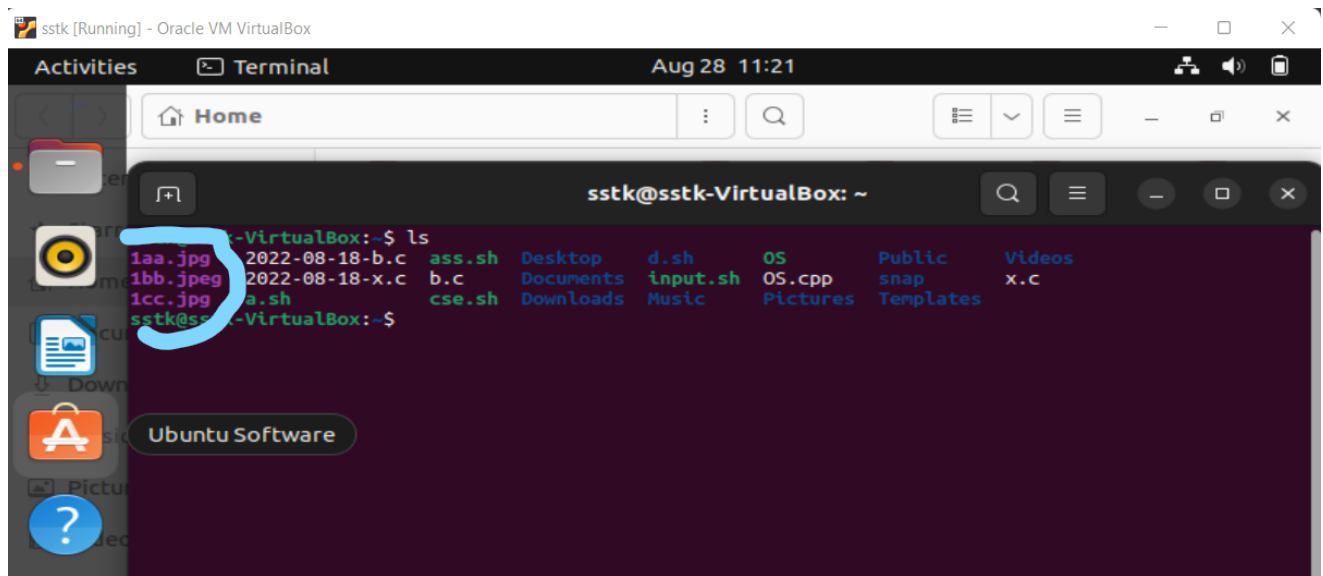
Batch: A2

Write shell scripts to

- A) Rename all files in the current directory that end in “.jpg” to begin with today’s date in the following format: YYYY-MM-DD. For example, if a picture of my cat was in the current directory and today was December 31,2020 it would change name from “mycat.jpg” to “2020-12-31-mycat.jpg” .

Before rename:

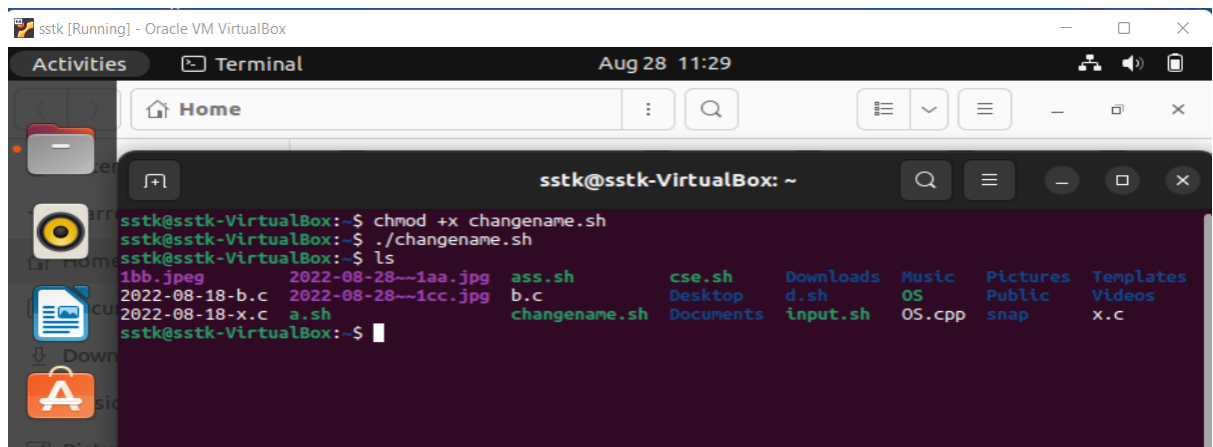


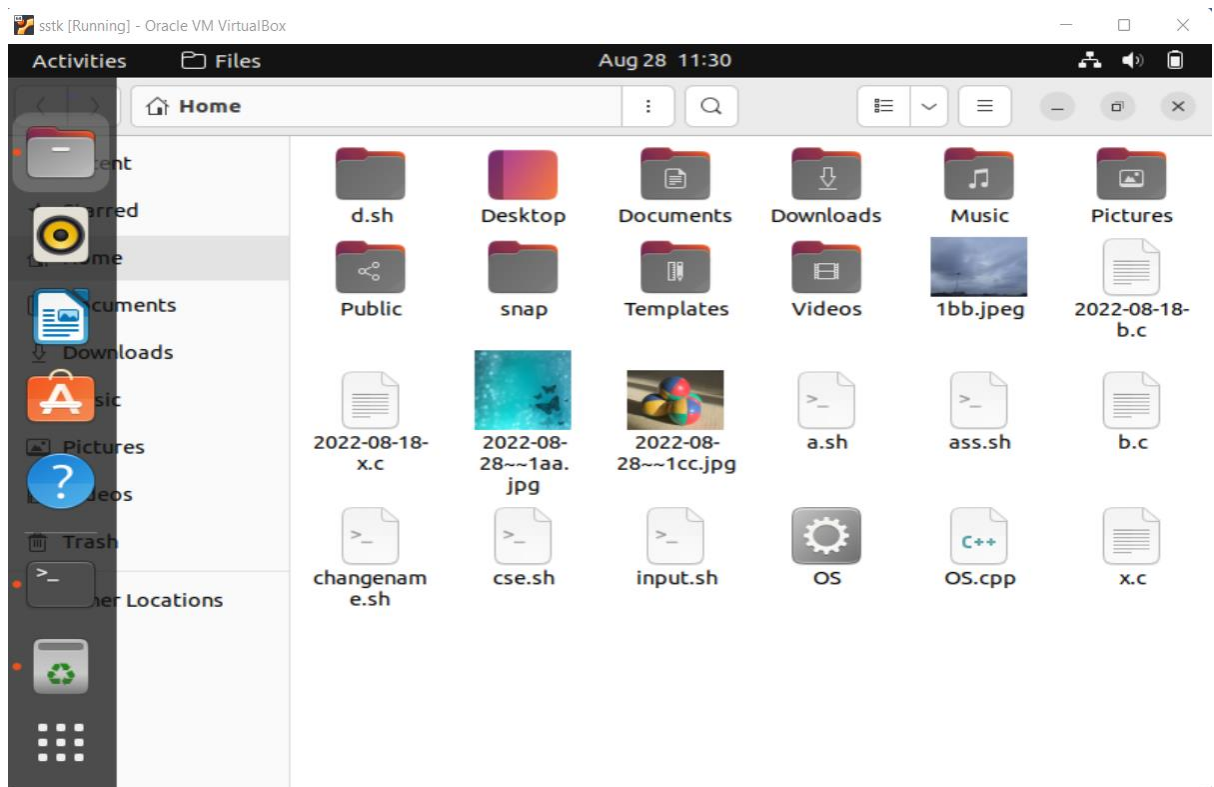


Code :



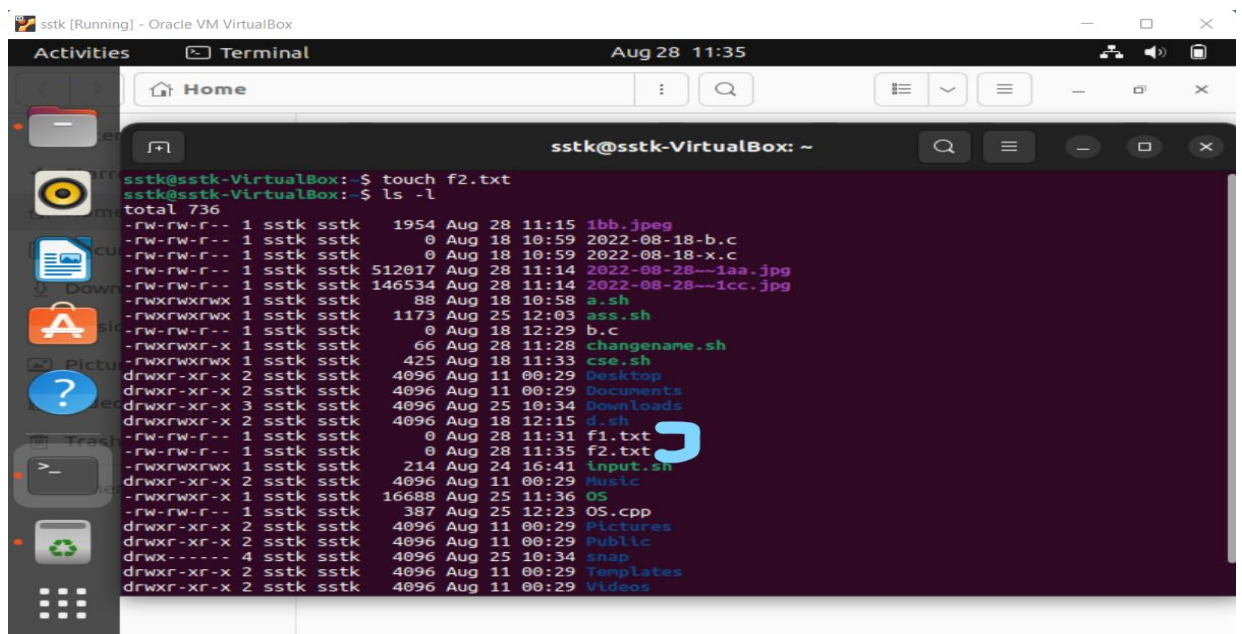
After Rename :





B) Delete the zero sized file

Before Deletion



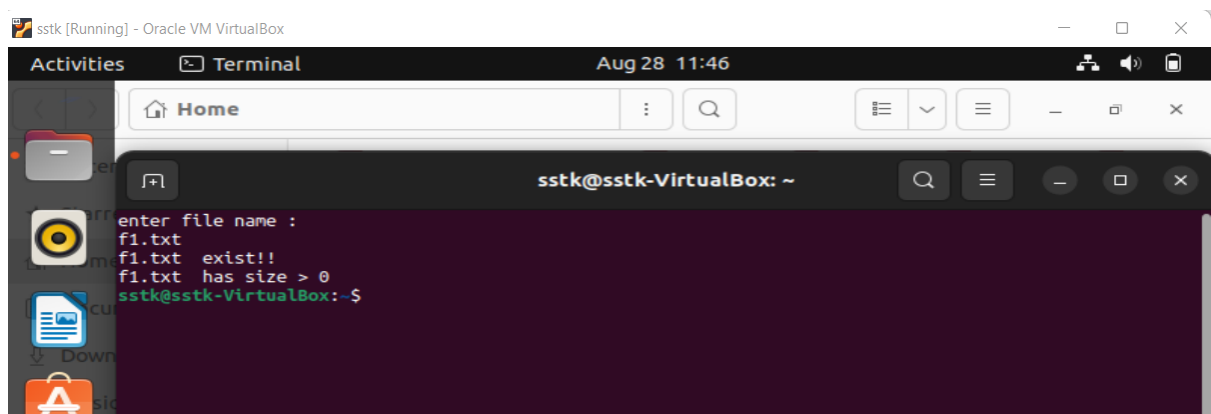
Code :



The screenshot shows a text editor window titled 'zerosize.sh' with the following code:

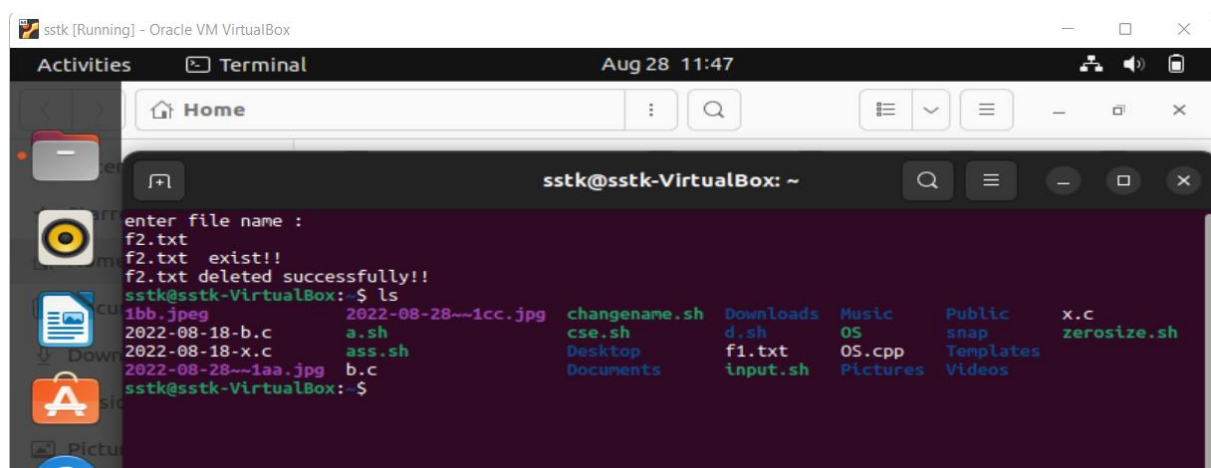
```
1 clear
2 echo "enter file name : "
3 read filenm
4 if [ -e $filenm ]
5 then echo $filenm " exist!!"
6     if [ -s $filenm ]
7     then echo $filenm " has size > 0"
8     else
9         rm $filenm
10        echo $filenm "deleted successfully!!"
11    fi
12 else
13 echo $filenm "file not exist!!"
14 fi
```

Output :



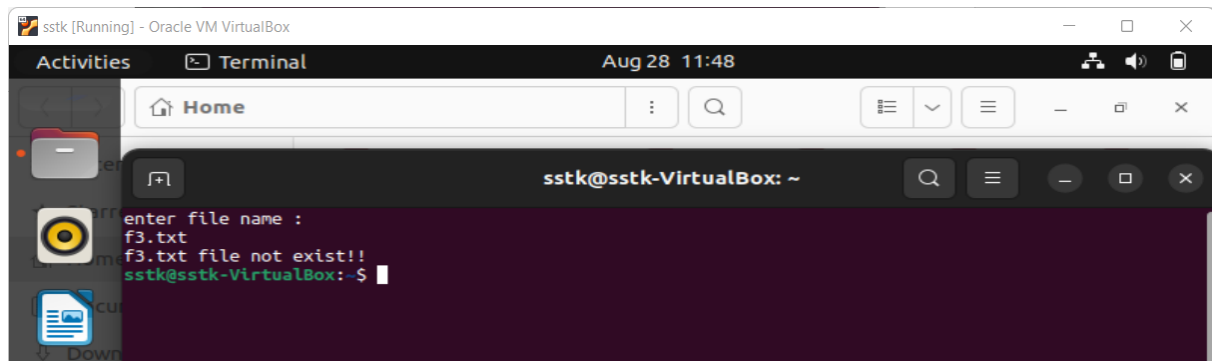
The screenshot shows a terminal window with the following output:

```
enter file name :
f1.txt
f1.txt exist!!
f1.txt has size > 0
sstk@sstk-VirtualBox:~$
```



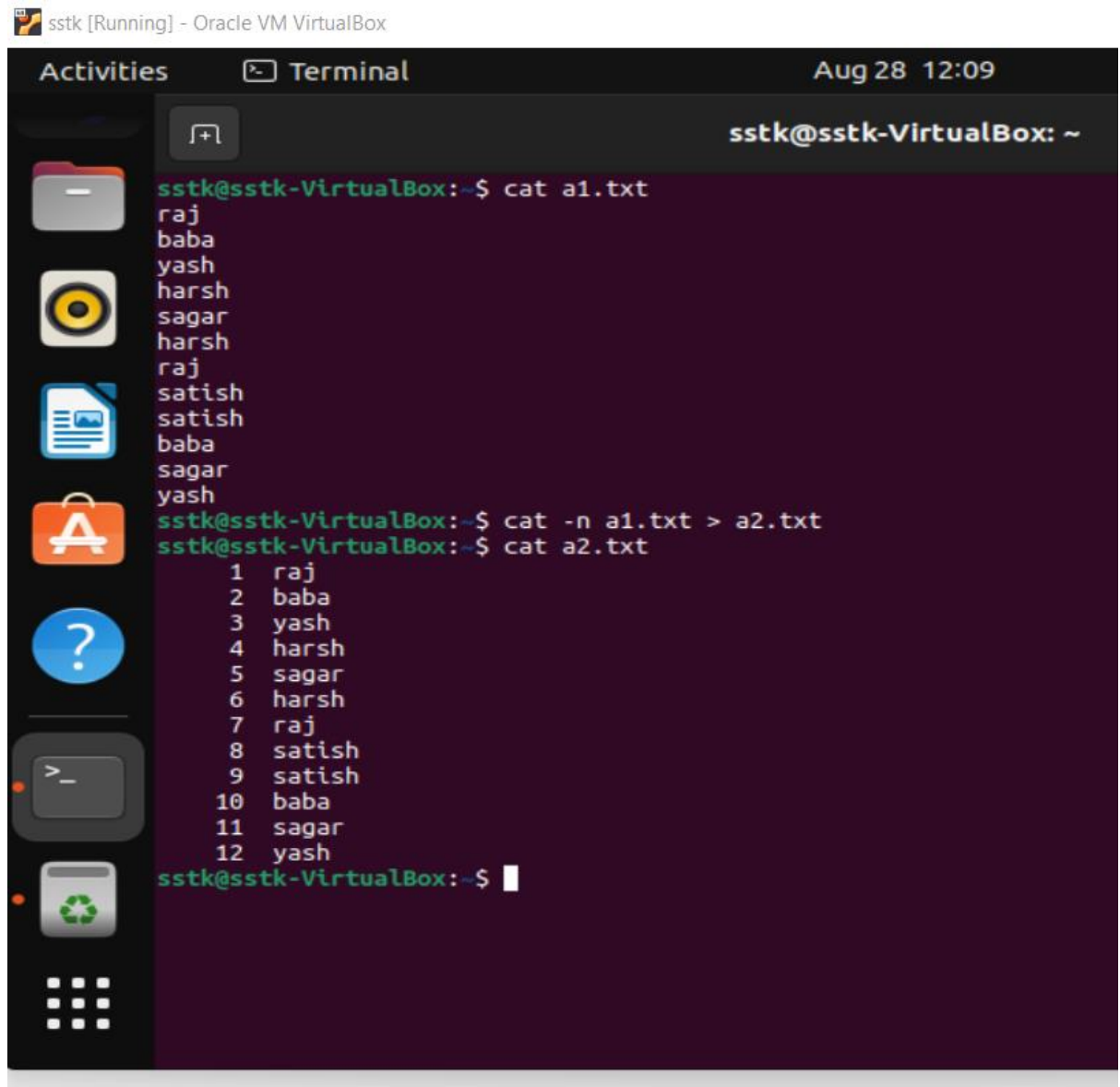
The screenshot shows a terminal window with the following output:

```
enter file name :
f2.txt
f2.txt exist!!
f2.txt deleted successfully!!
sstk@sstk-VirtualBox:~$ ls
1bb.jpeg          2022-08-28--1cc.jpg  changename.sh  Downloads  Music      Public      x.c
2022-08-18-b.c    a.sh                cse.sh         d.sh       OS         snap        zerosize.sh
2022-08-18-x.c    ass.sh              Desktop        f1.txt     OS.cpp     Templates
2022-08-28--1aa.jpg b.c                 Documents     input.sh   Pictures   Videos
sstk@sstk-VirtualBox:~$
```



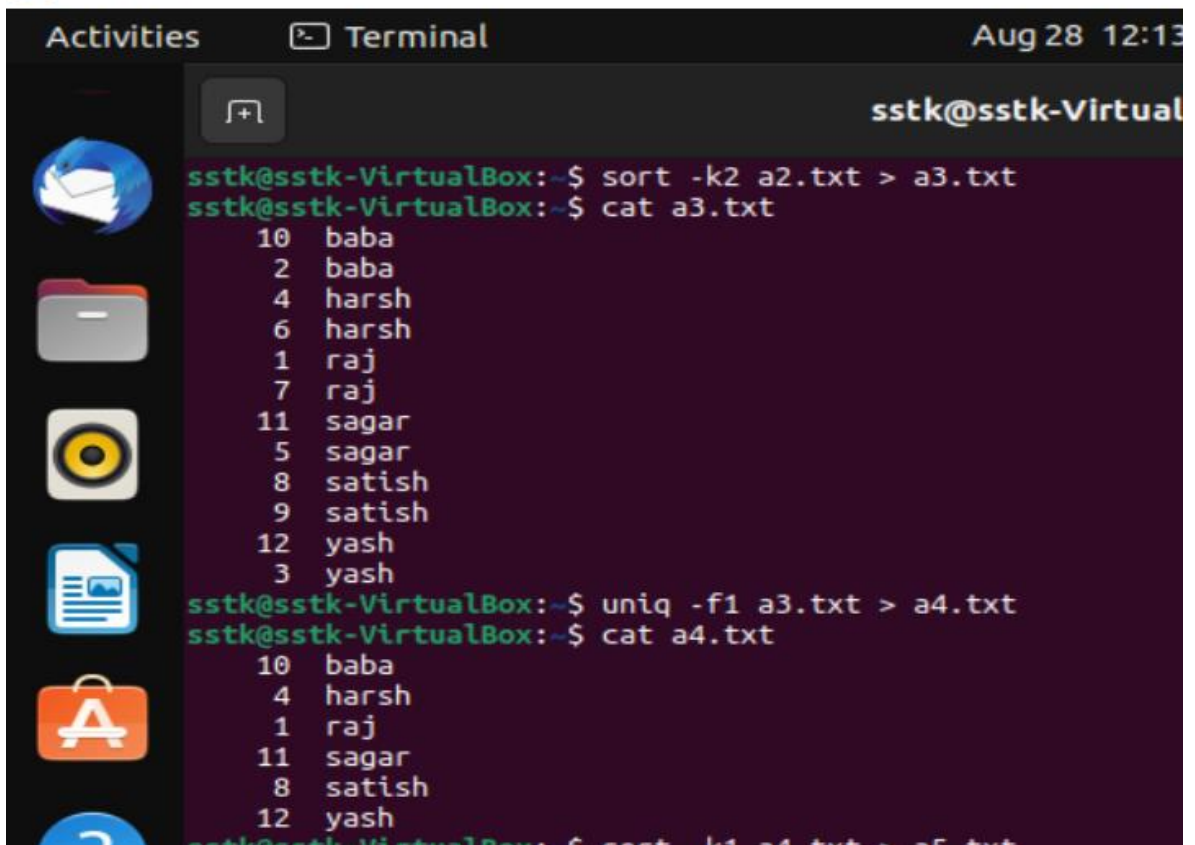
```
sstk [Running] - Oracle VM VirtualBox
Aug 28 11:48
Activities Terminal
Home
sstk@sstk-VirtualBox: ~
enter file name :
f3.txt
f3.txt file not exist!!
sstk@sstk-VirtualBox:~$
```

- c) Take an input file and remove identical lines (or duplicate lines from the file)



```
sstk [Running] - Oracle VM VirtualBox
Aug 28 12:09
Activities Terminal
sstk@sstk-VirtualBox: ~
sstk@sstk-VirtualBox:~$ cat a1.txt
raj
baba
yash
harsh
sagar
harsh
raj
satish
satish
baba
sagar
yash
sstk@sstk-VirtualBox:~$ cat -n a1.txt > a2.txt
sstk@sstk-VirtualBox:~$ cat a2.txt
1 raj
2 baba
3 yash
4 harsh
5 sagar
6 harsh
7 raj
8 satish
9 satish
10 baba
11 sagar
12 yash
sstk@sstk-VirtualBox:~$
```

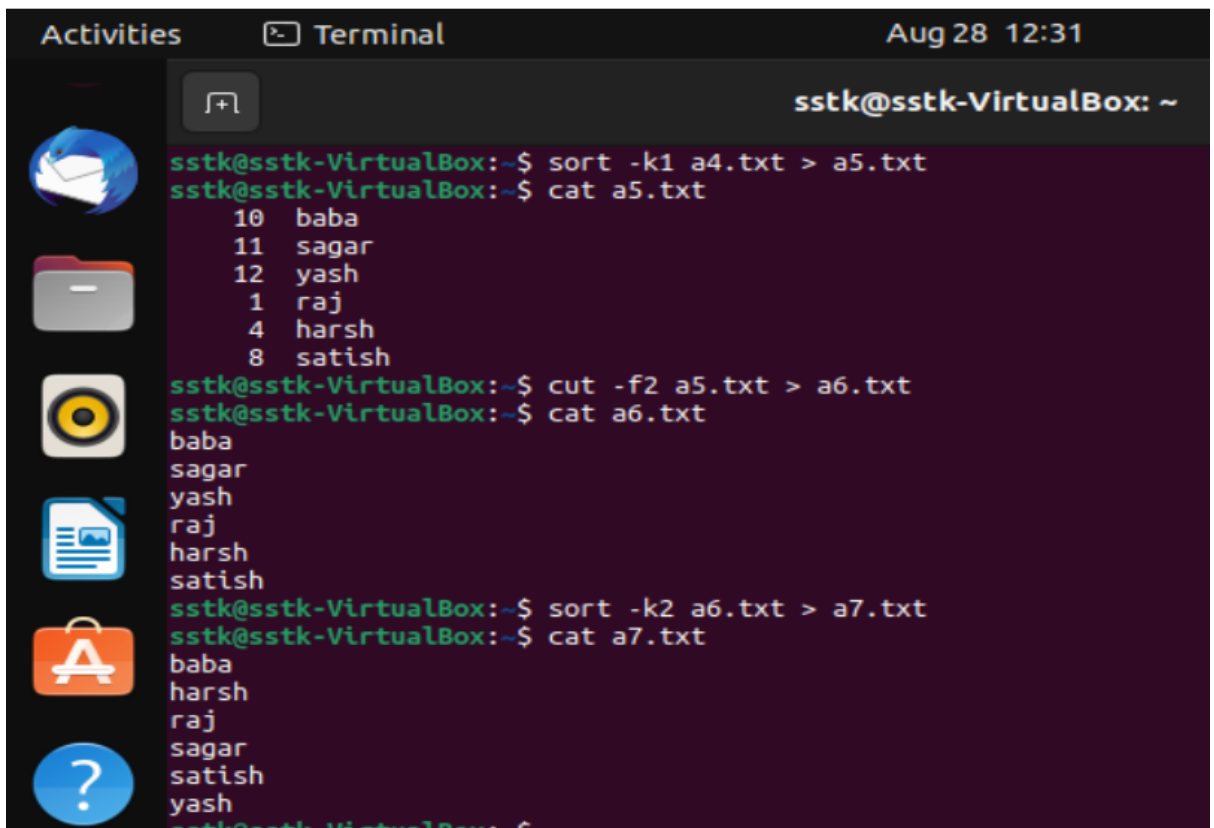
sstk [Running] - Oracle VM VirtualBox



The terminal window shows a series of commands and their outputs. The user starts by sorting a file by the second column and then uses 'cat' to display the result. Next, they use 'uniq' to remove duplicate lines and 'cat' to show the unique list. Finally, they sort the unique list by the first column. The left sidebar contains icons for various applications like a mail client, file manager, and music player.

```
sstk@ssstk-VirtualBox:~$ sort -k2 a2.txt > a3.txt
ssstk@ssstk-VirtualBox:~$ cat a3.txt
10 baba
2 baba
4 harsh
6 harsh
1 raj
7 raj
11 sagar
5 sagar
8 satish
9 satish
12 yash
3 yash
ssstk@ssstk-VirtualBox:~$ uniq -f1 a3.txt > a4.txt
ssstk@ssstk-VirtualBox:~$ cat a4.txt
10 baba
4 harsh
1 raj
11 sagar
8 satish
12 yash
ssstk@ssstk-VirtualBox:~$ sort -k1 a4.txt > a5.txt
```

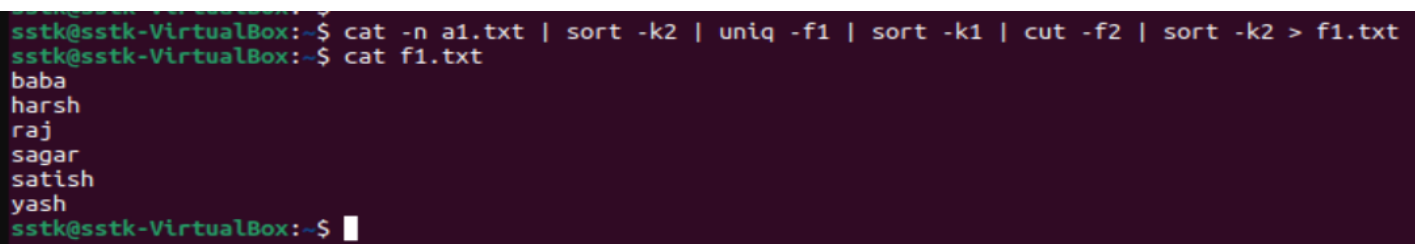
sstk [Running] - Oracle VM VirtualBox



The terminal window continues the file manipulation process. The user sorts the file by the first column, then uses 'cut' to extract the second column's values. They then sort these values by the second column. The left sidebar shows the same application icons as the previous window.

```
sstk@ssstk-VirtualBox:~$ sort -k1 a4.txt > a5.txt
ssstk@ssstk-VirtualBox:~$ cat a5.txt
10 baba
11 sagar
12 yash
1 raj
4 harsh
8 satish
ssstk@ssstk-VirtualBox:~$ cut -f2 a5.txt > a6.txt
ssstk@ssstk-VirtualBox:~$ cat a6.txt
baba
sagar
yash
raj
harsh
satish
ssstk@ssstk-VirtualBox:~$ sort -k2 a6.txt > a7.txt
ssstk@ssstk-VirtualBox:~$ cat a7.txt
baba
harsh
raj
sagar
satish
yash
ssstk@ssstk-VirtualBox:~$
```

All in one



```
sstk@sstk-VirtualBox:~$ cat -n a1.txt | sort -k2 | uniq -f1 | sort -k1 | cut -f2 | sort -k2 > f1.txt
sstk@sstk-VirtualBox:~$ cat f1.txt
baba
harsh
raj
sagar
satish
yash
sstk@sstk-VirtualBox:~$
```

The image shows a terminal window with a dark background. On the left side, there is a vertical toolbar with icons for window management (a square with a minus sign, a plus sign, and a close button) and a grid of application icons. The terminal text shows a series of commands being executed in a shell. The first command is a complex pipeline: `cat -n a1.txt | sort -k2 | uniq -f1 | sort -k1 | cut -f2 | sort -k2 > f1.txt`. The second command is `cat f1.txt`, which outputs a list of names: `baba`, `harsh`, `raj`, `sagar`, `satish`, and `yash`. The prompt `sstk@sstk-VirtualBox:~$` is visible at the end of each line.