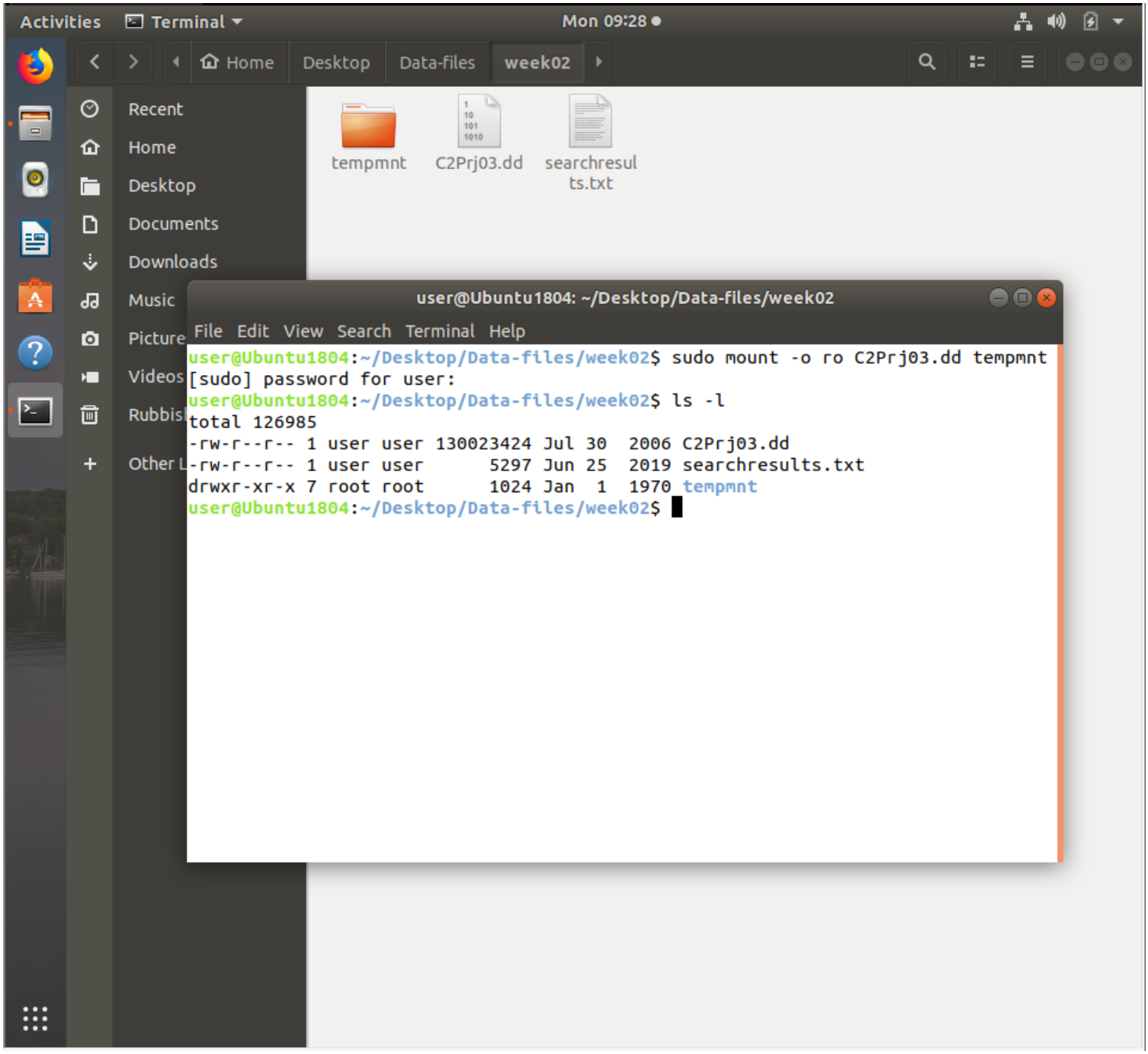
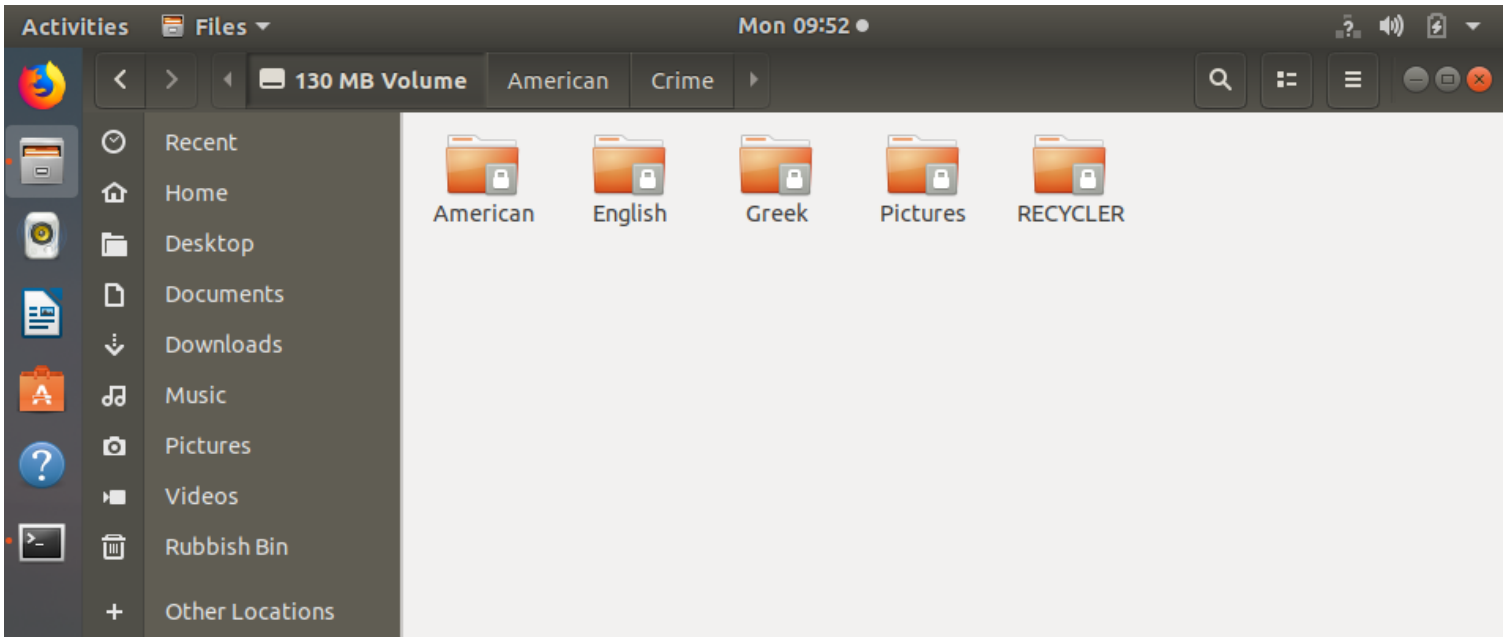
Introducing Linux mount

First, I launched the terminal and navigated to the **~/Desktop/Data files/week02** directory, then typed in the command **"sudo mount -o ro C2Prj03.dd tempmnt"** to mount the image and the mount process will be completed.

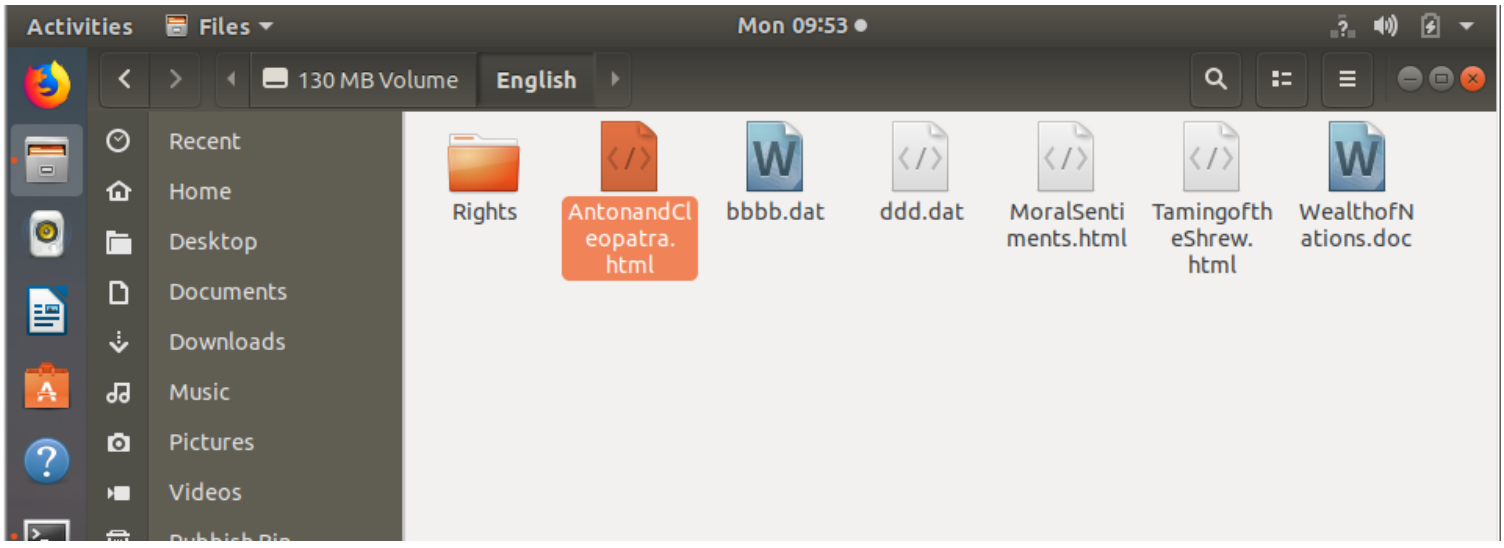


Then I used the file browser tool to navigate through the image. This image contains a few folders with contents and a RECYCLER folder with the information of deleted files.

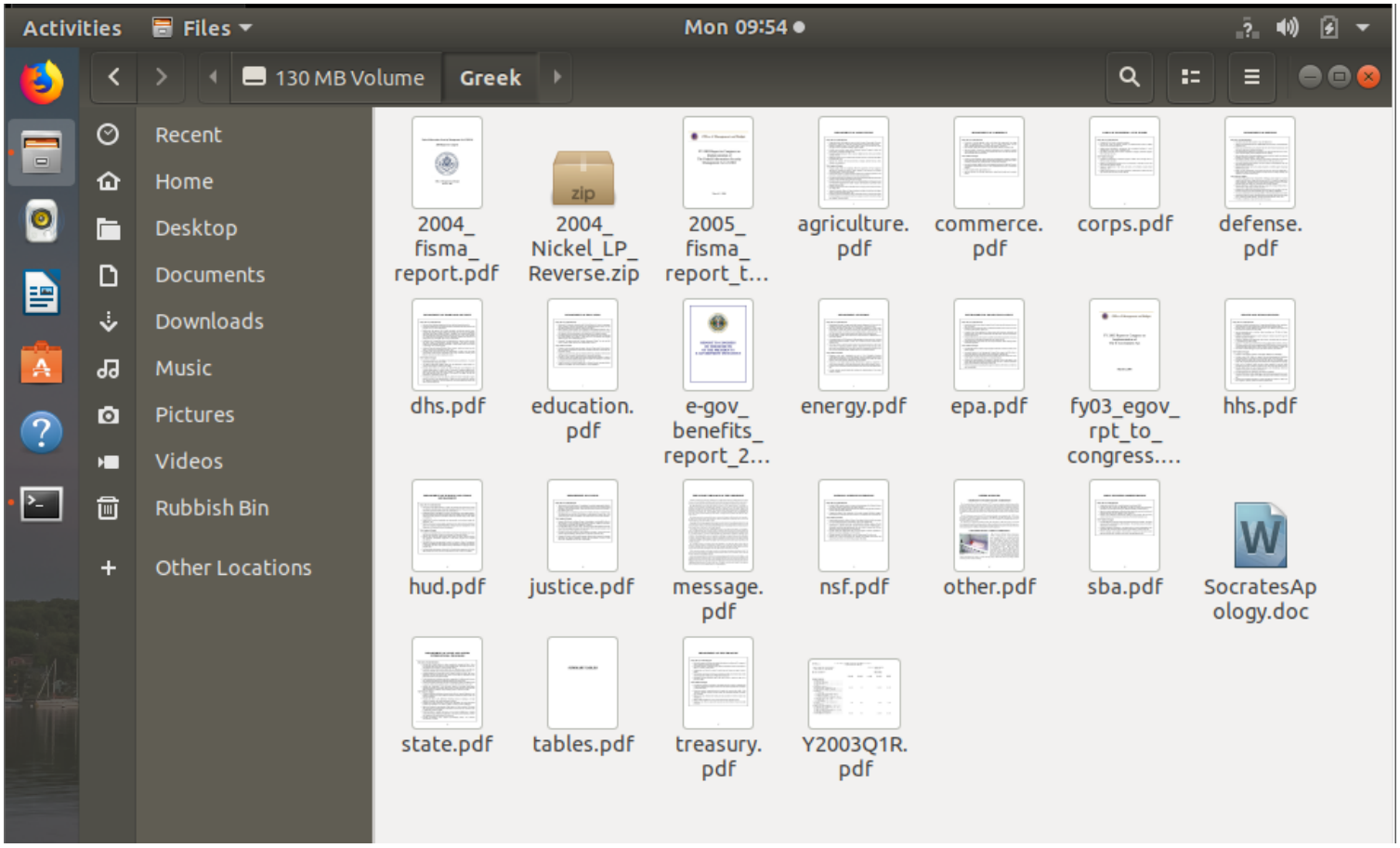


Then I went through all the directories

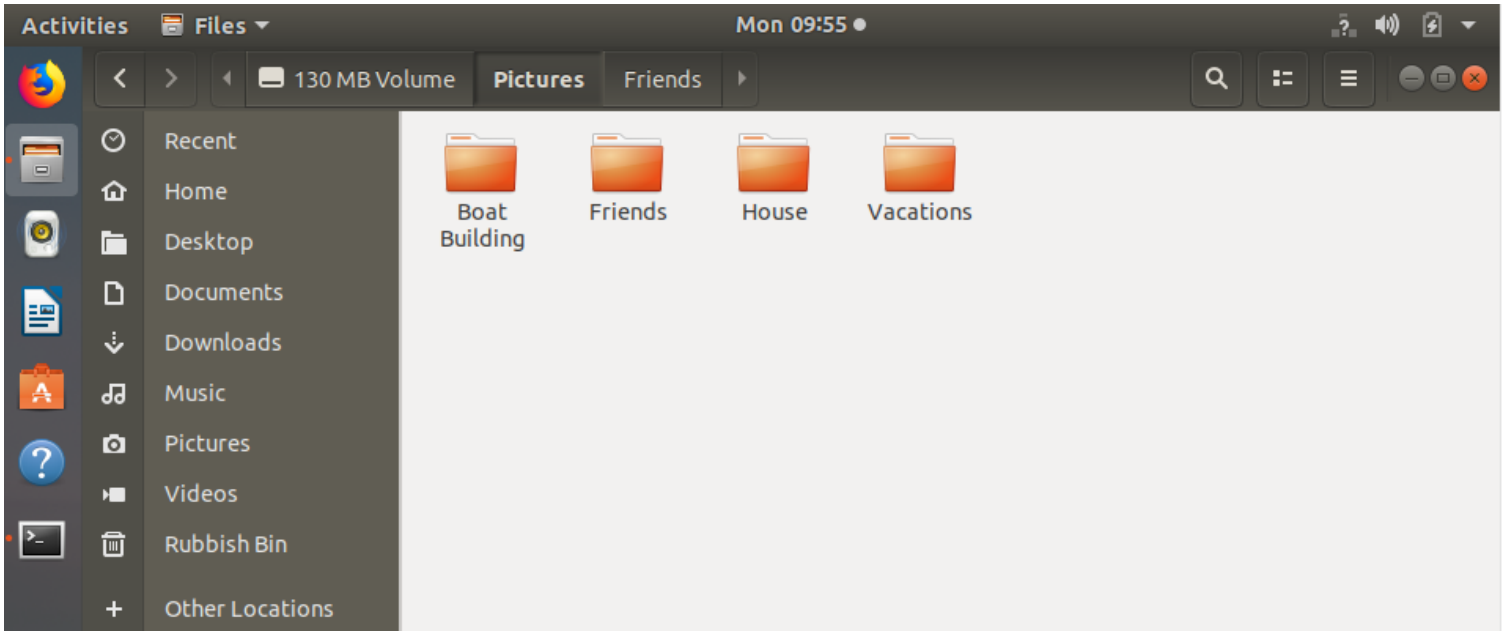
English



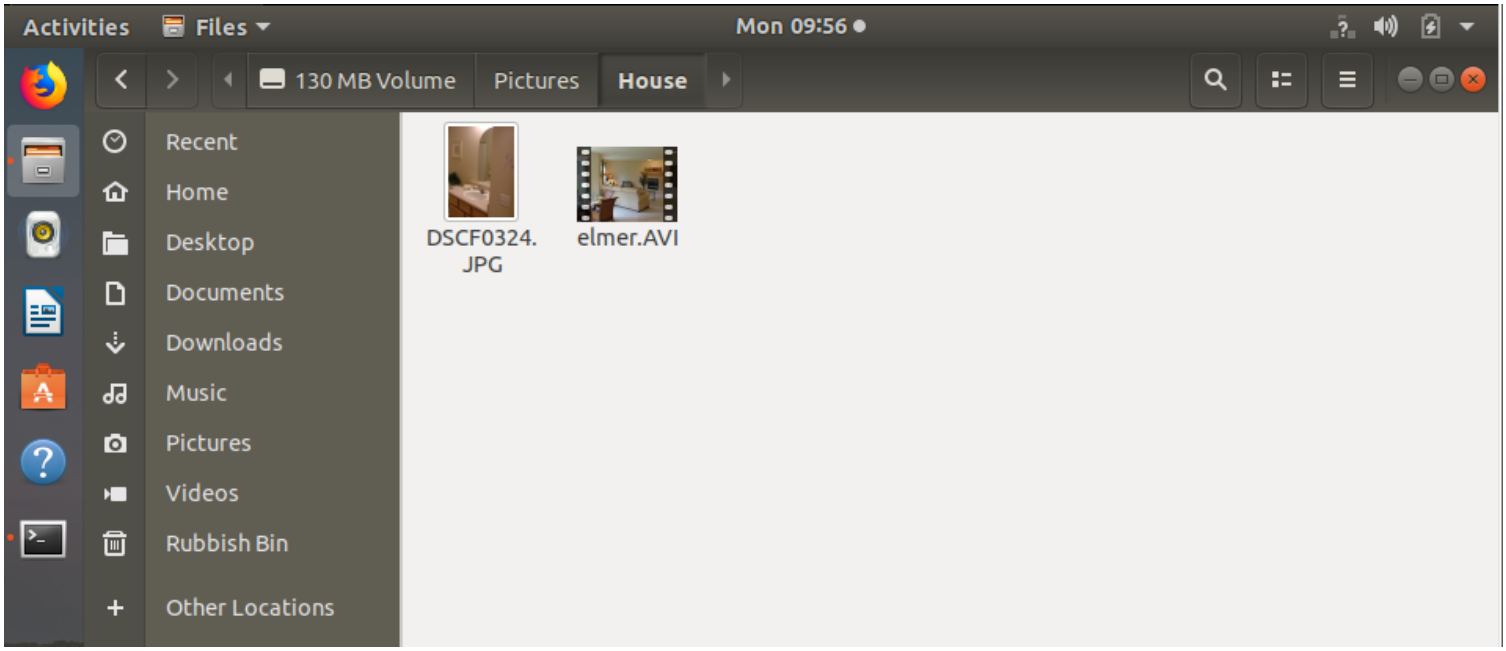
Greek



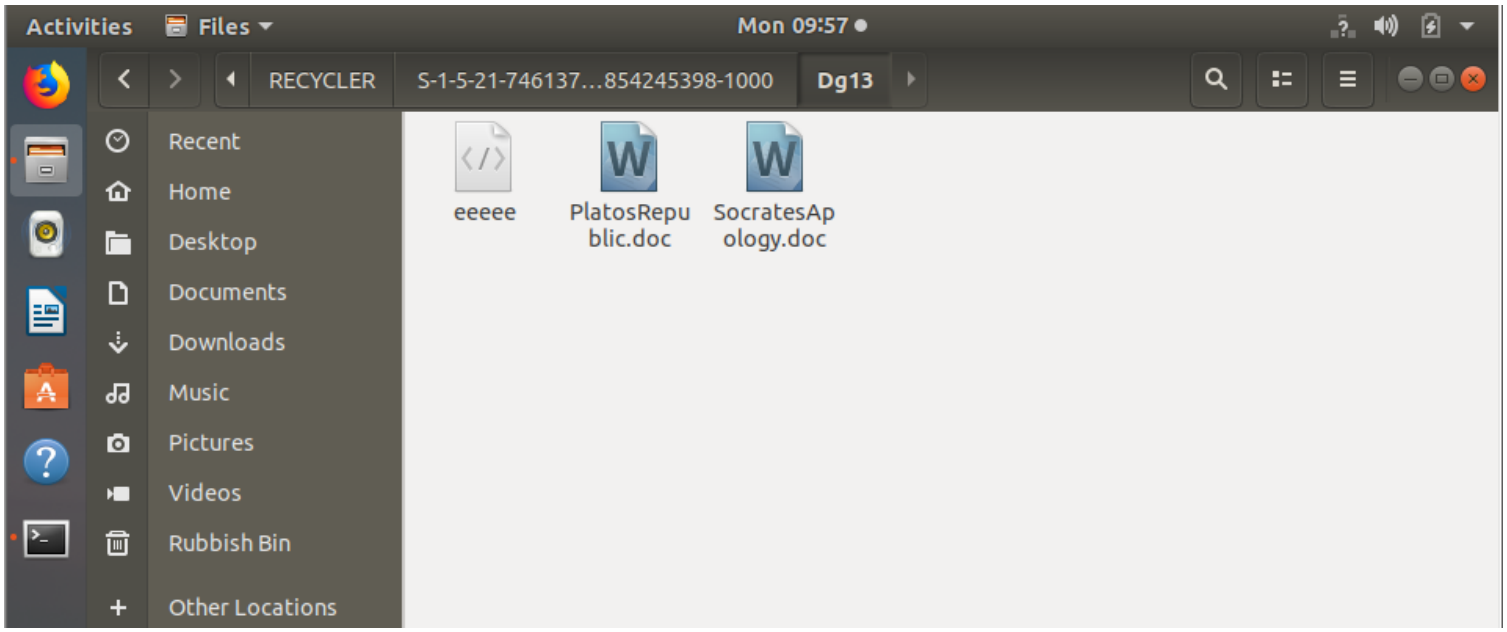
Pictures



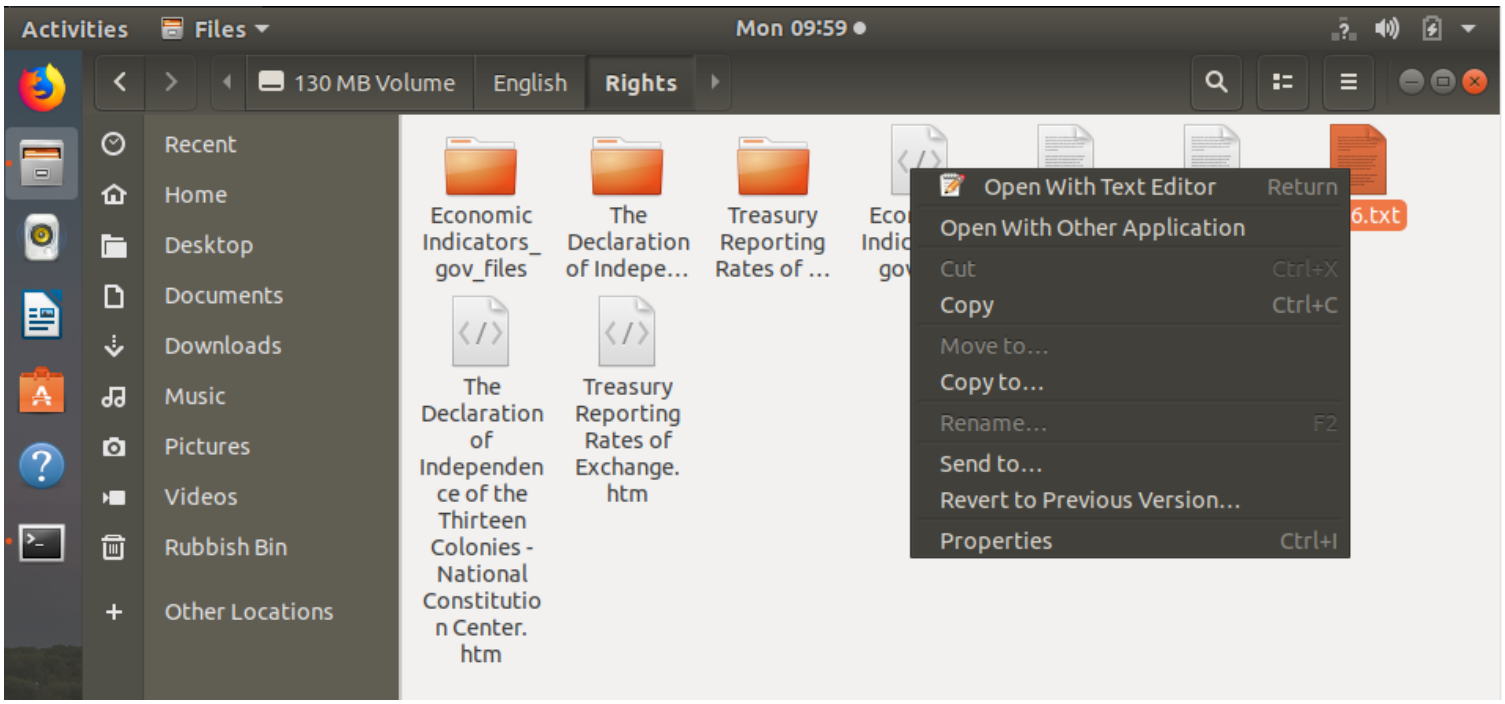

Activities
Files
Mon 09:55
130 MB Volume
Pictures
Friends
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Rubbish Bin
Other Locations
March_ April17_ 2005
DSCF0103. JPG
DSCF0145. JPG
DSCF0153. JPG
DSCF0204. JPG
DSCF0214. JPG


Activities
Files
Mon 09:56
130 MB Volume
Pictures
House
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Rubbish Bin
Other Locations
DSCF0324. JPG
elmer.AVI

Recycler



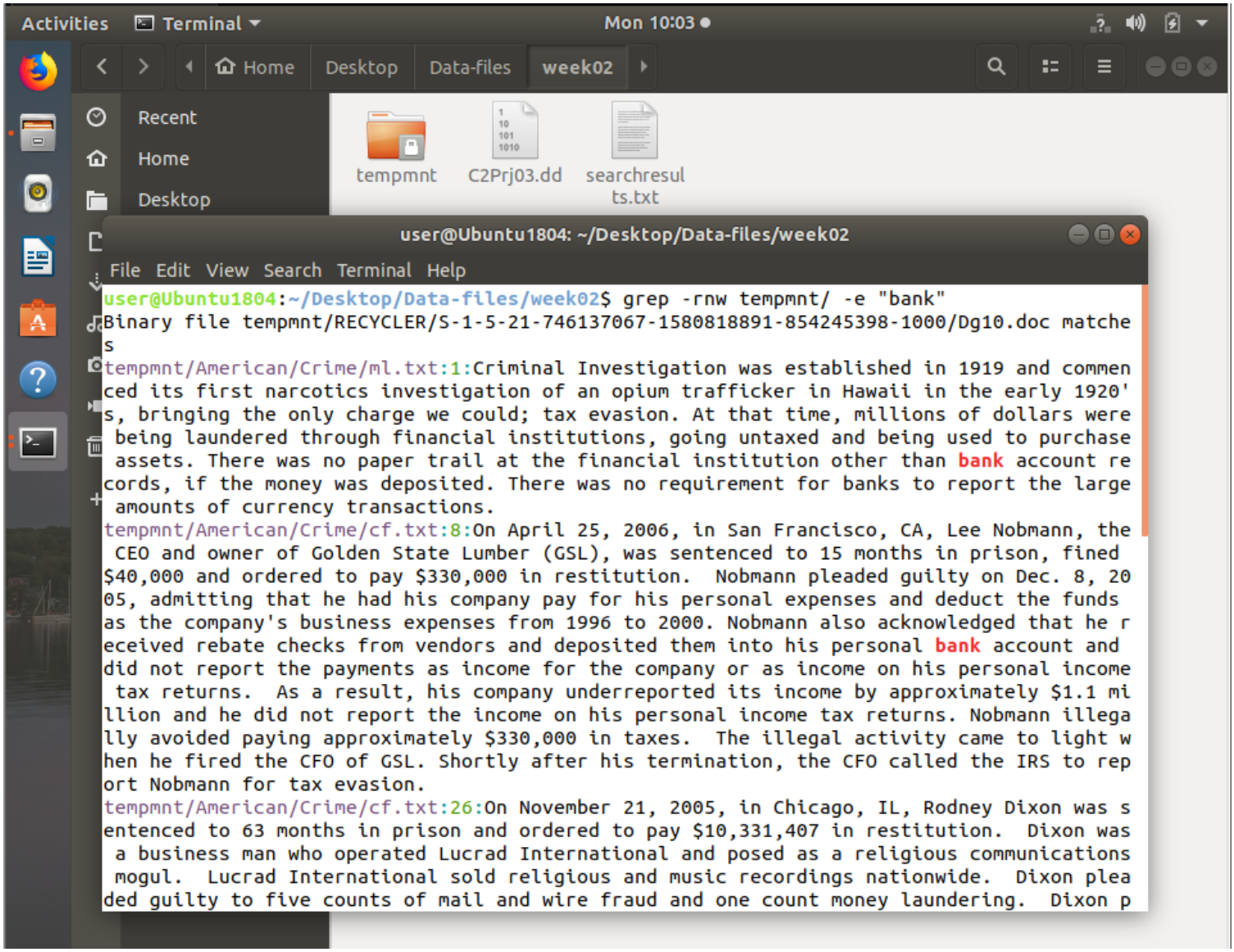
Then I tried to alter the files in the image, by trying to delete and create new folders. It didn't work because in the command I gave as read-only while mounting the image.




Activities
Files
Mon 09:59
130 MB Volume
English
Rights
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Rubbish Bin
Other Locations
Economic Indicators_ gov_files
The Declaration of Indepe...
Treasury Reporting Rates of ...
Economic Indicators_ gov.htm
Magna Carta - National ...
no-2.txt
no-6.txt
The Declaration of Independence of the Thirteen Colonies - National Constitution Center.htm
Treasury Reporting Rates of Exchange.htm
New Folder Shift+Ctrl+N
Paste Ctrl+V
Select All Ctrl+A
Properties Ctrl+I
Restore Missing Files...
Open in Terminal

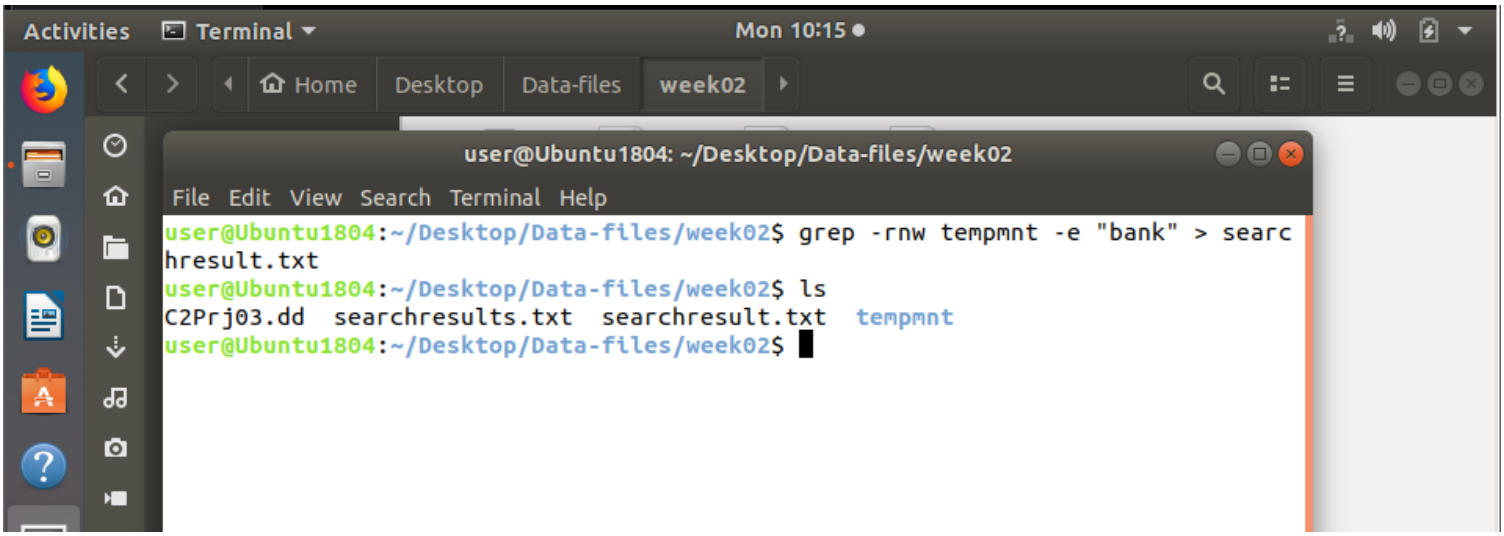
Search Contents with the tool grep

Here I started off with the command given in the assignment **“grep -rnw tempmnt -e “bank”** to search for the keyword “bank” on the disk image mounted.

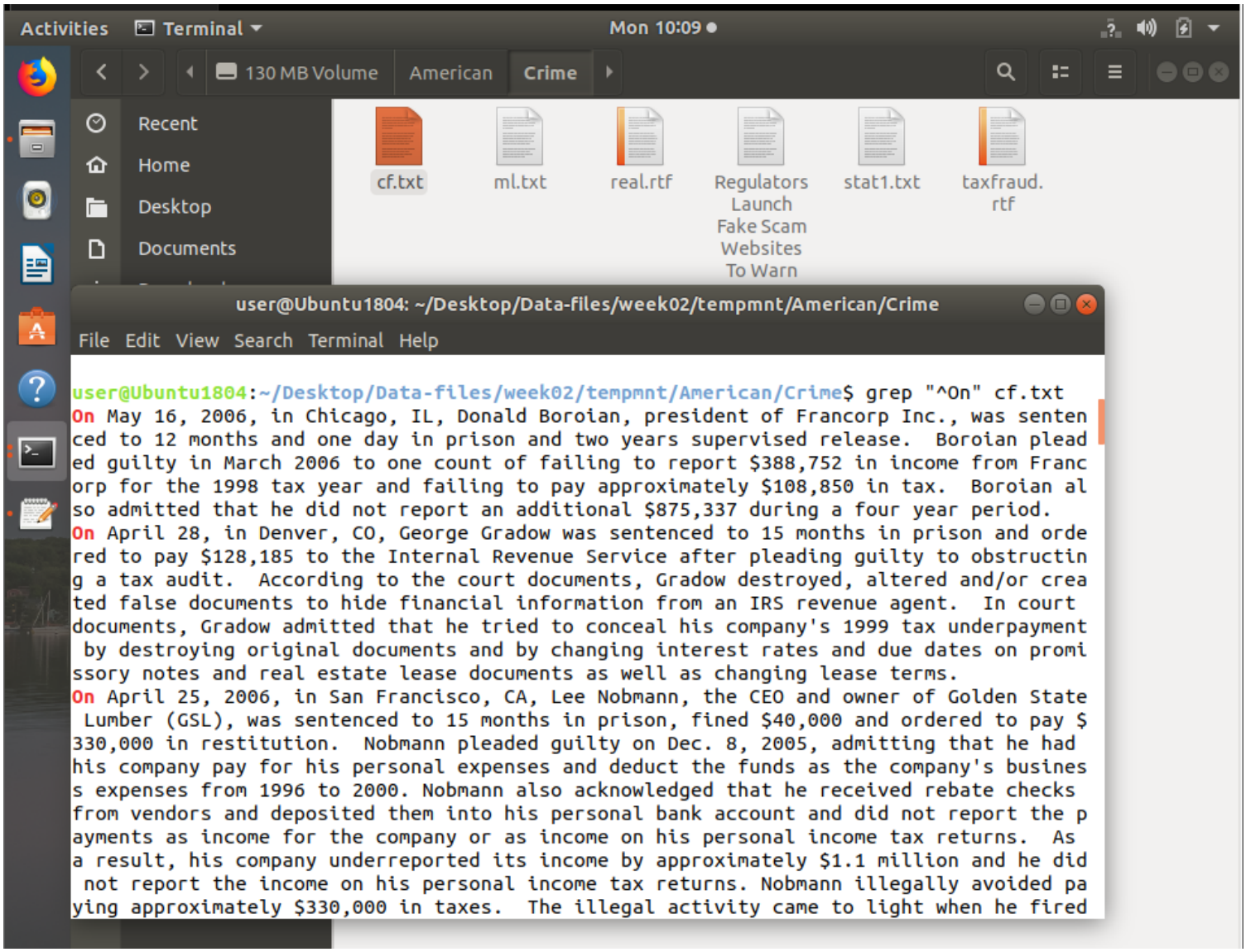


Then I tried some other commands from grep as well:

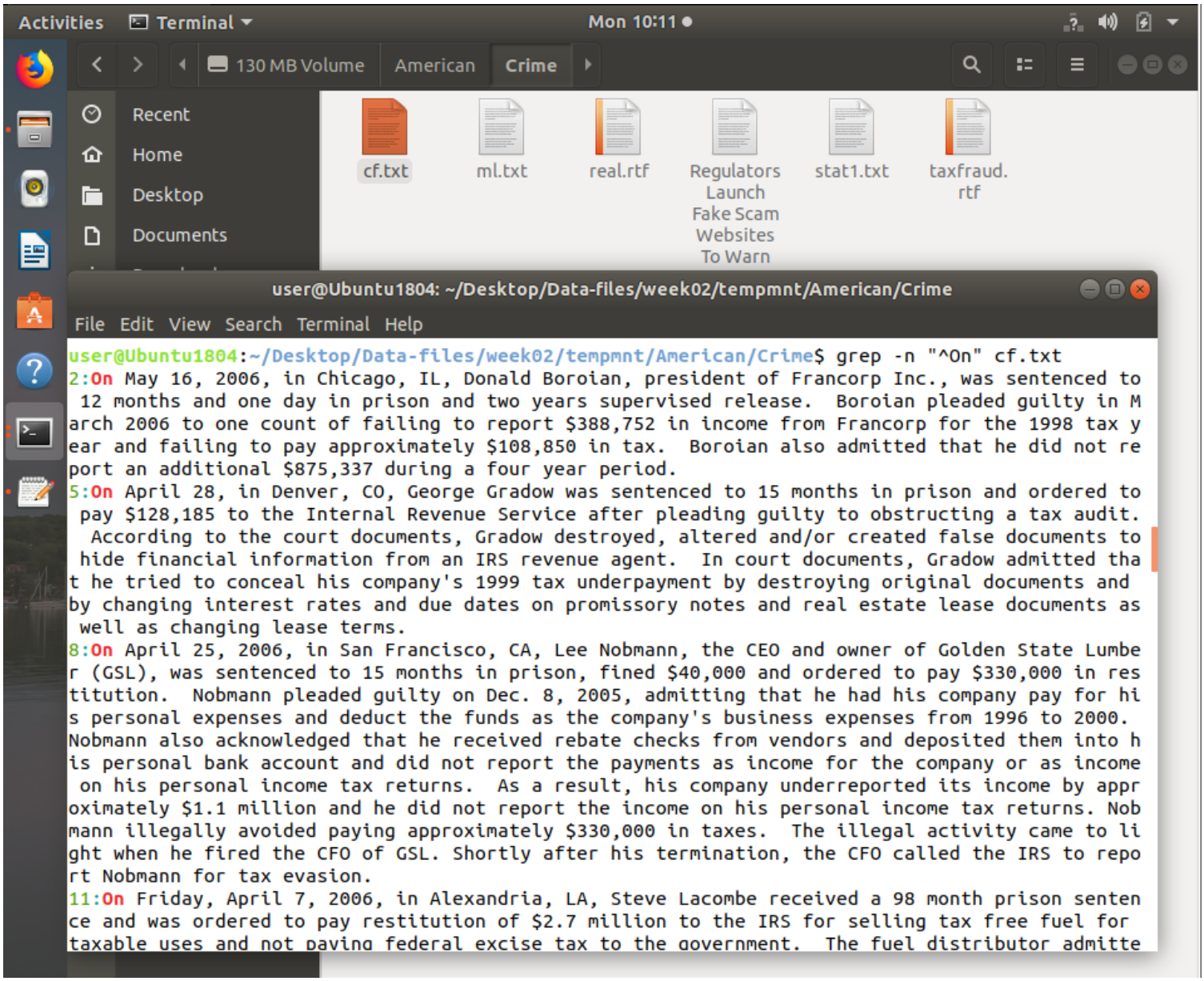
This will extract the output to another file and same it as a text file, in this case I have given the name searchresult.txt



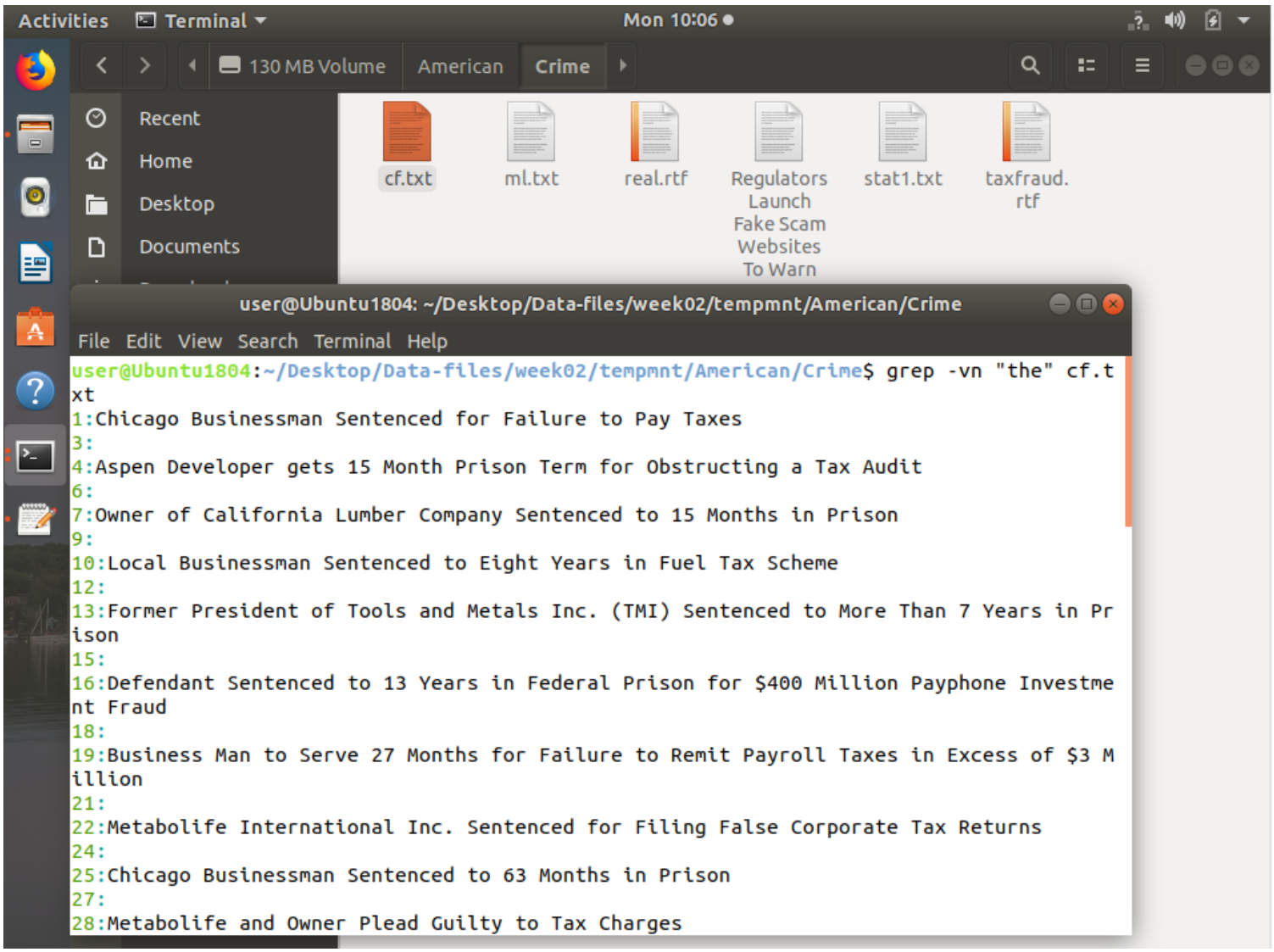
Then this command will show the lines where the word “On” comes first in the text file called cf.txt



Then this command will show on which line does the word “On” comes first in the text file called cf.txt



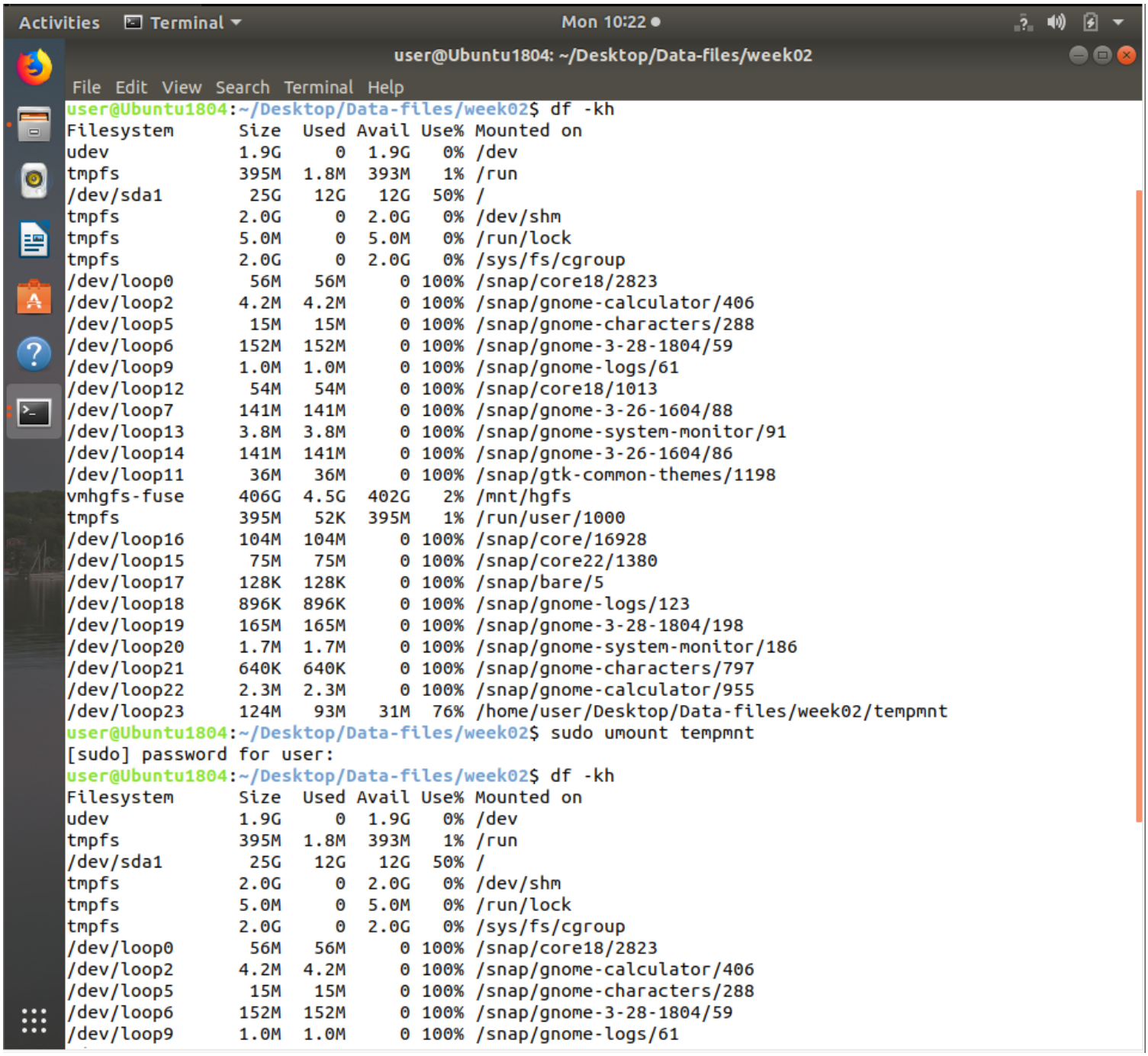
Then at last this command will remove the lines with the word “the” in the text file called cf.txt and still show the number of all the lines

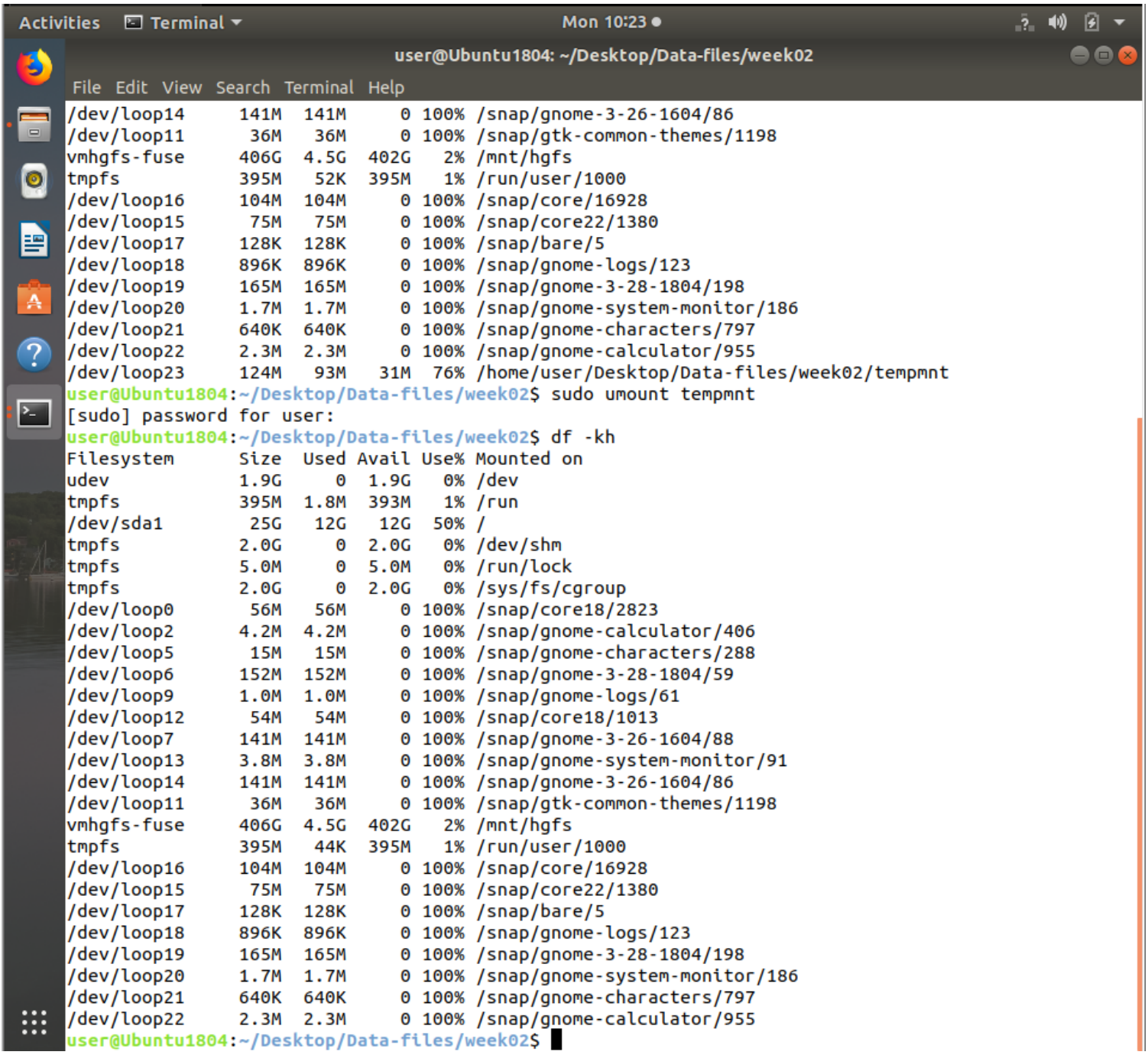


Introducing the tool umount

Now I will be unmounting the image since I'm done with the investigation. For that I will be using a tool called umount, using the command called **"sudo umount tempmnt". "**

First, I check for the available images using the command **df -kh,** the image was still mounted, then I typed the command mentioned above to unmount it. Finally, to check whether the unmount process is successful, I again used the **df -kh** to check for the available images. Since the image is not found, it means it has been unmounted successfully.




Activities
Terminal
Mon 10:23
user@Ubuntu1804: ~/Desktop/Data-files/week02
File Edit View Search Terminal Help
/dev/loop14 141M 141M 0 100% /snap/gnome-3-26-1604/86
/dev/loop11 36M 36M 0 100% /snap/gtk-common-themes/1198
vmhgfs-fuse 406G 4.5G 402G 2% /mnt/hgfs
tmpfs 395M 52K 395M 1% /run/user/1000
/dev/loop16 104M 104M 0 100% /snap/core/16928
/dev/loop15 75M 75M 0 100% /snap/core22/1380
/dev/loop17 128K 128K 0 100% /snap/bare/5
/dev/loop18 896K 896K 0 100% /snap/gnome-logs/123
/dev/loop19 165M 165M 0 100% /snap/gnome-3-28-1804/198
/dev/loop20 1.7M 1.7M 0 100% /snap/gnome-system-monitor/186
/dev/loop21 640K 640K 0 100% /snap/gnome-characters/797
/dev/loop22 2.3M 2.3M 0 100% /snap/gnome-calculator/955
/dev/loop23 124M 93M 31M 76% /home/user/Desktop/Data-files/week02/tempmnt
user@Ubuntu1804:~/Desktop/Data-files/week02$ sudo umount tempmnt
[sudo] password for user:
user@Ubuntu1804:~/Desktop/Data-files/week02$ df -kh
Filesystem Size Used Avail Use% Mounted on
udev 1.9G 0 1.9G 0% /dev
tmpfs 395M 1.8M 393M 1% /run
/dev/sda1 25G 12G 12G 50% /
tmpfs 2.0G 0 2.0G 0% /dev/shm
tmpfs 5.0M 0 5.0M 0% /run/lock
tmpfs 2.0G 0 2.0G 0% /sys/fs/cgroup
/dev/loop0 56M 56M 0 100% /snap/core18/2823
/dev/loop2 4.2M 4.2M 0 100% /snap/gnome-calculator/406
/dev/loop5 15M 15M 0 100% /snap/gnome-characters/288
/dev/loop6 152M 152M 0 100% /snap/gnome-3-28-1804/59
/dev/loop9 1.0M 1.0M 0 100% /snap/gnome-logs/61
/dev/loop12 54M 54M 0 100% /snap/core18/1013
/dev/loop7 141M 141M 0 100% /snap/gnome-3-26-1604/88
/dev/loop13 3.8M 3.8M 0 100% /snap/gnome-system-monitor/91
/dev/loop14 141M 141M 0 100% /snap/gnome-3-26-1604/86
/dev/loop11 36M 36M 0 100% /snap/gtk-common-themes/1198
vmhgfs-fuse 406G 4.5G 402G 2% /mnt/hgfs
tmpfs 395M 44K 395M 1% /run/user/1000
/dev/loop16 104M 104M 0 100% /snap/core/16928
/dev/loop15 75M 75M 0 100% /snap/core22/1380
/dev/loop17 128K 128K 0 100% /snap/bare/5
/dev/loop18 896K 896K 0 100% /snap/gnome-logs/123
/dev/loop19 165M 165M 0 100% /snap/gnome-3-28-1804/198
/dev/loop20 1.7M 1.7M 0 100% /snap/gnome-system-monitor/186
/dev/loop21 640K 640K 0 100% /snap/gnome-characters/797
/dev/loop22 2.3M 2.3M 0 100% /snap/gnome-calculator/955
user@Ubuntu1804:~/Desktop/Data-files/week02$