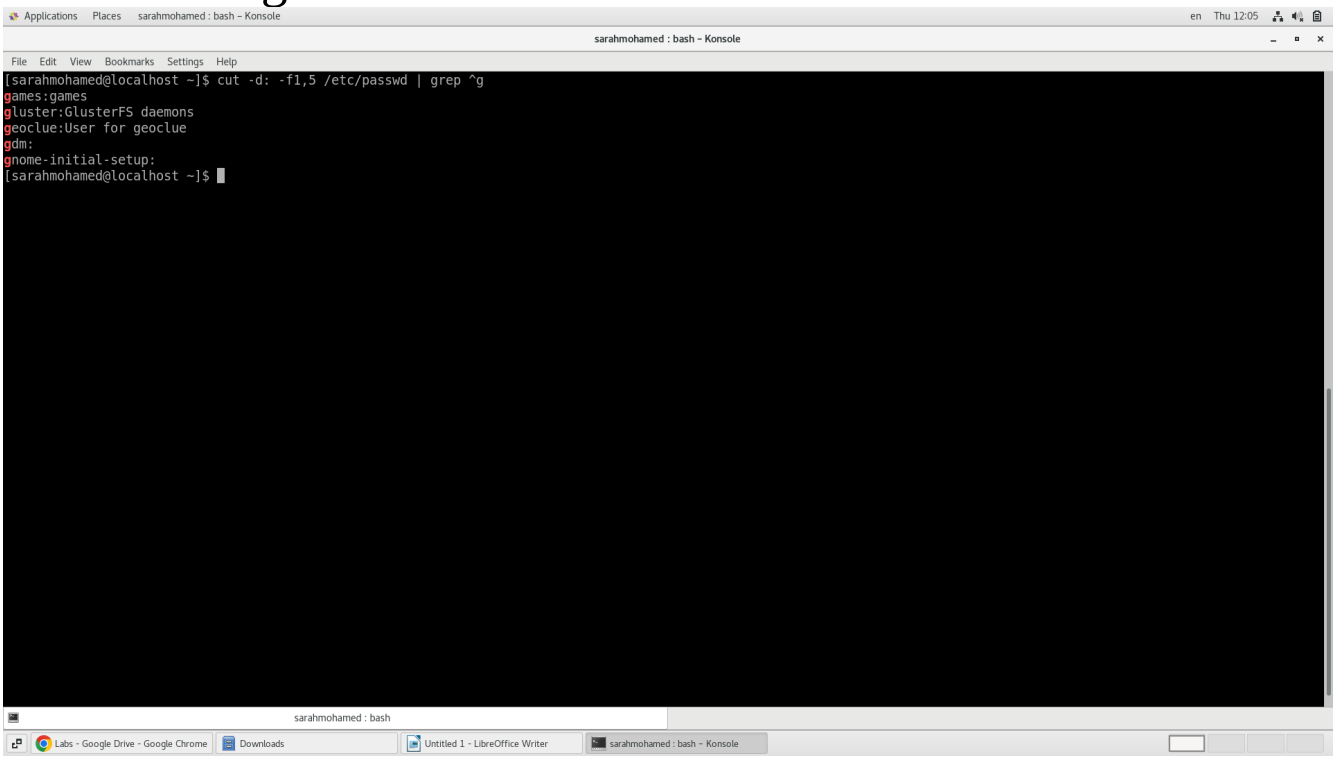
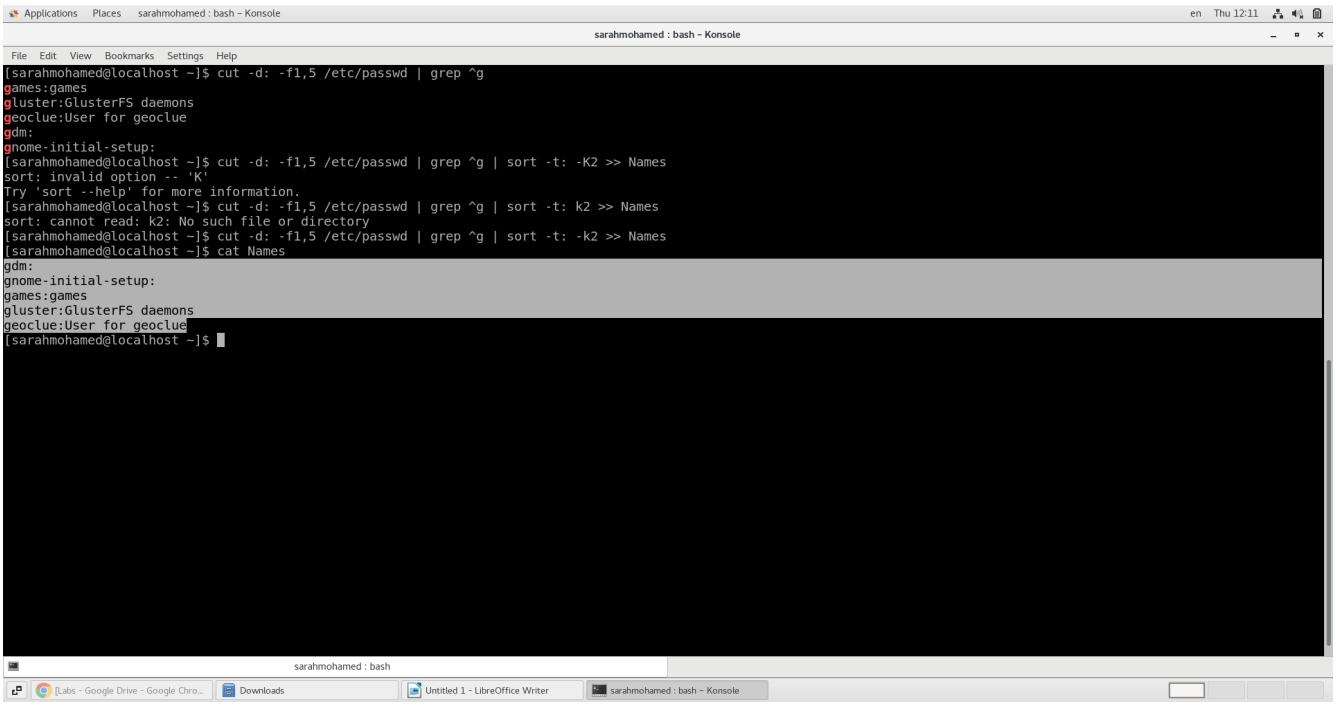
Lab 4

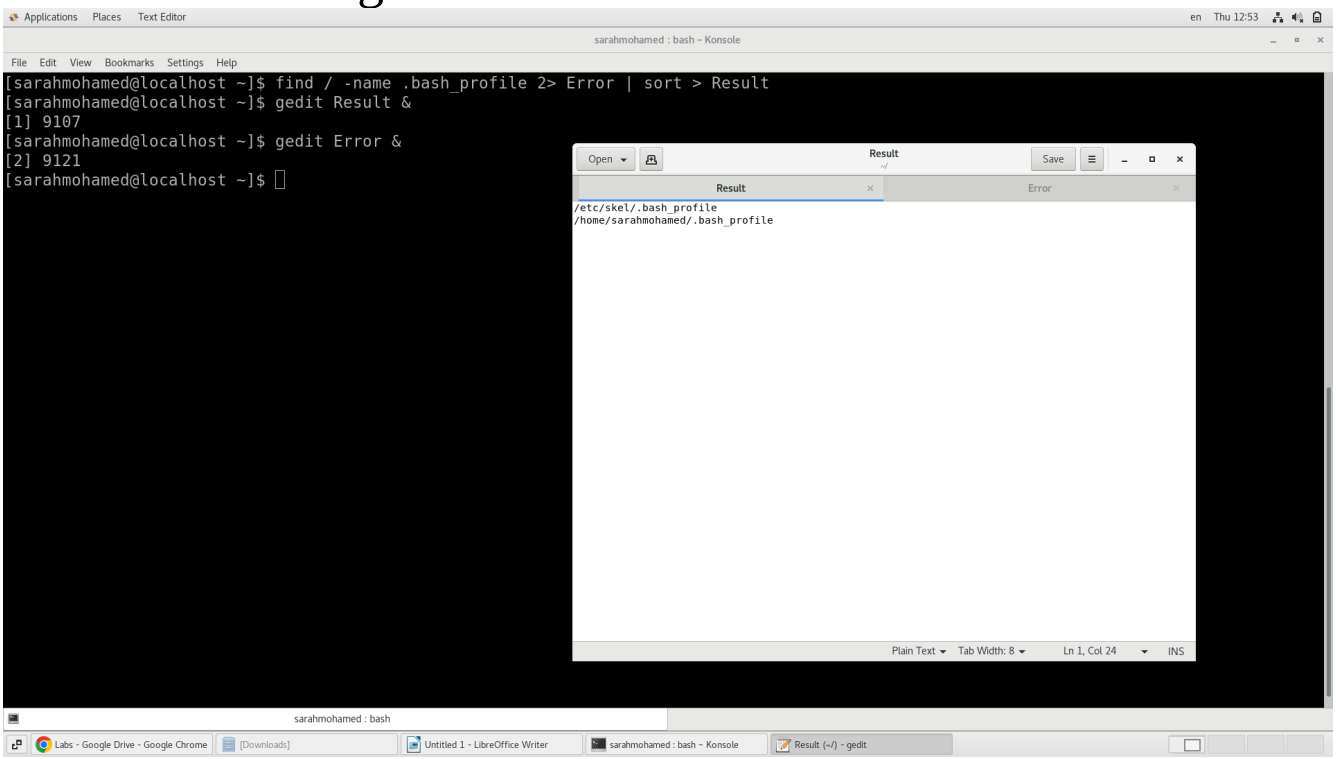
4. Get the logins name and full names (comment) of logins starts with “g”.



5. Save the output of the last command sorted by their full names in a file.

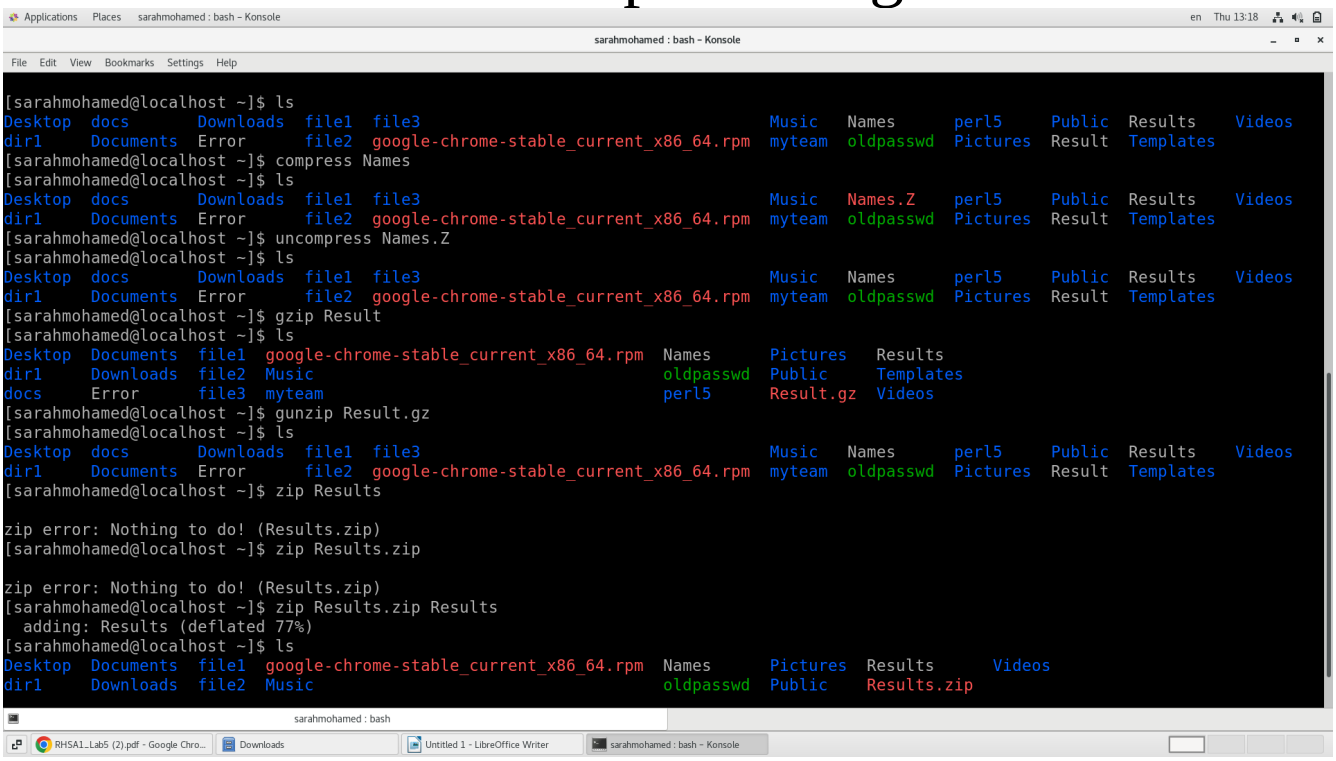


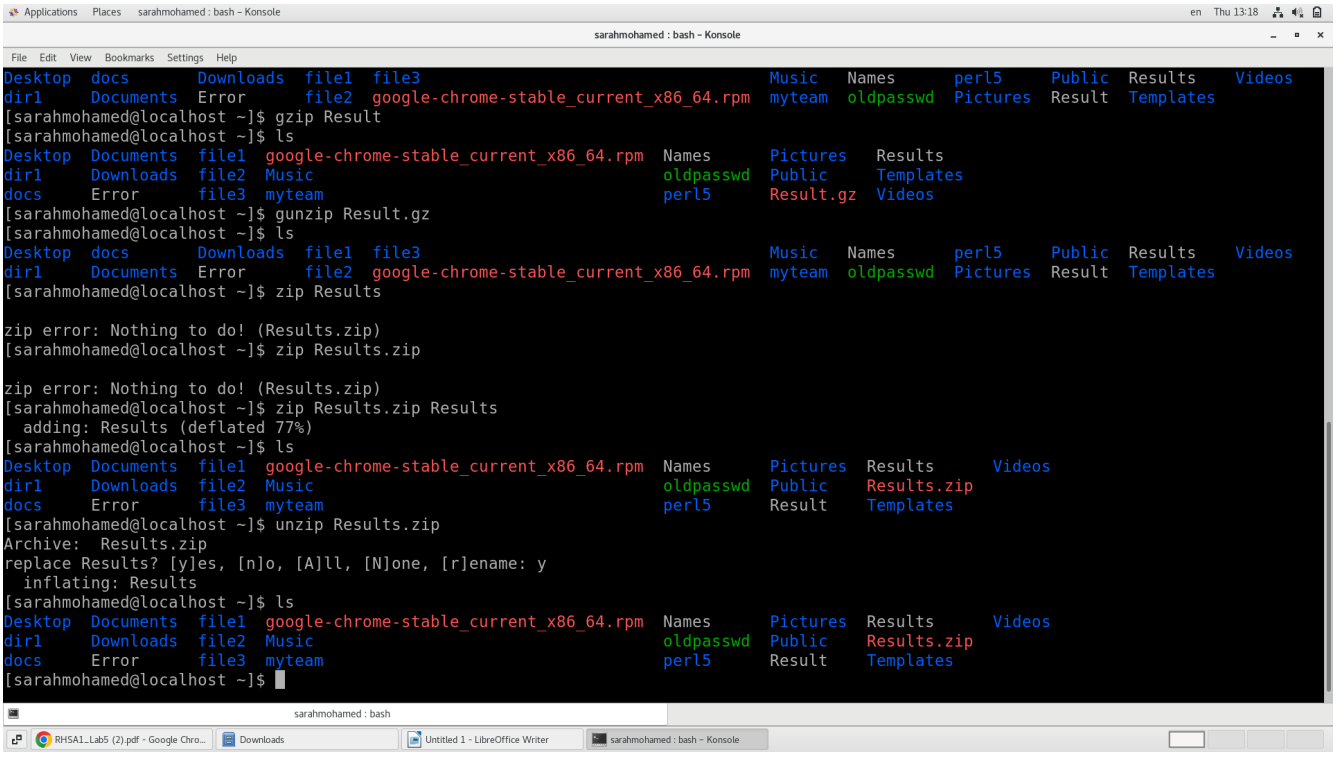
6. Write two commands:
Second: sorts the output of ls command on / recursively,
Saving their output and error in 2 different files and sending them to the background.



Lab 5

1. Compress a file by compress, gzip, zip commands and decompress it again.



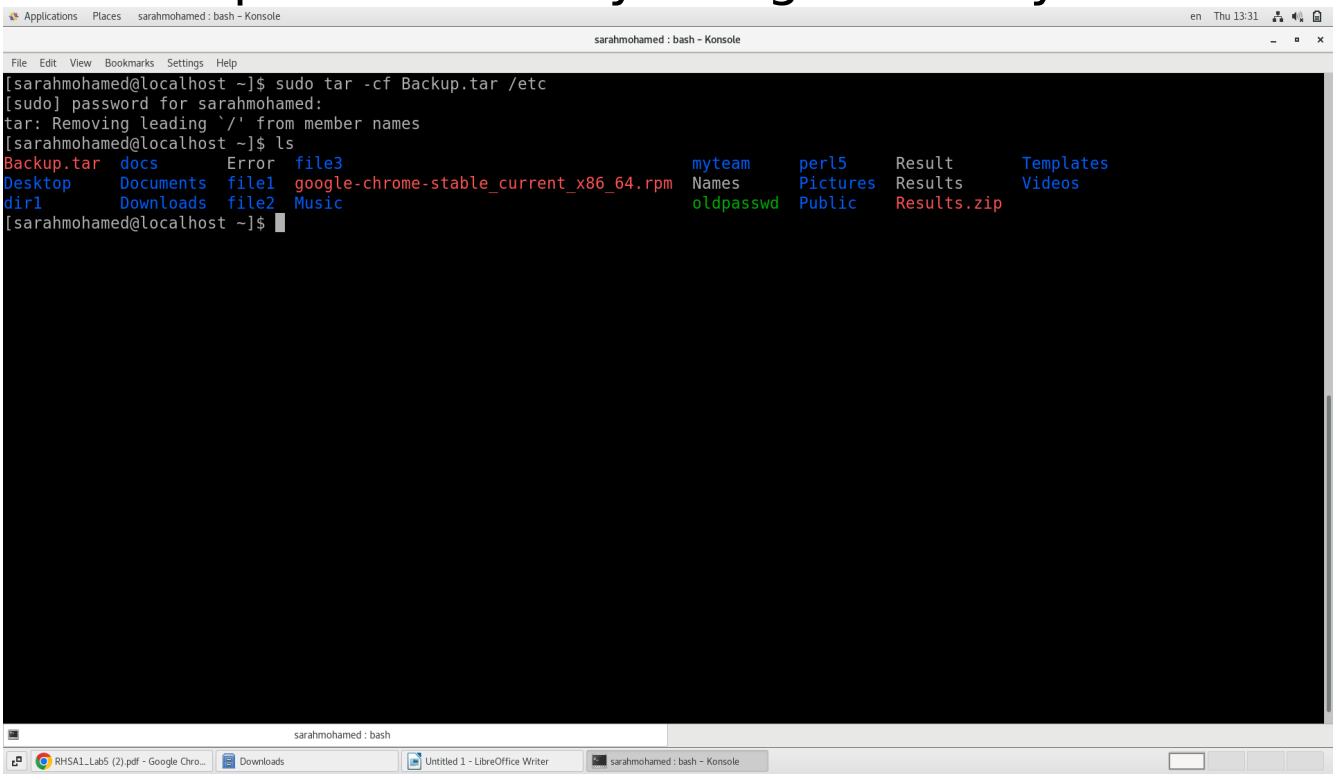


State the differences between compress and gzip commands

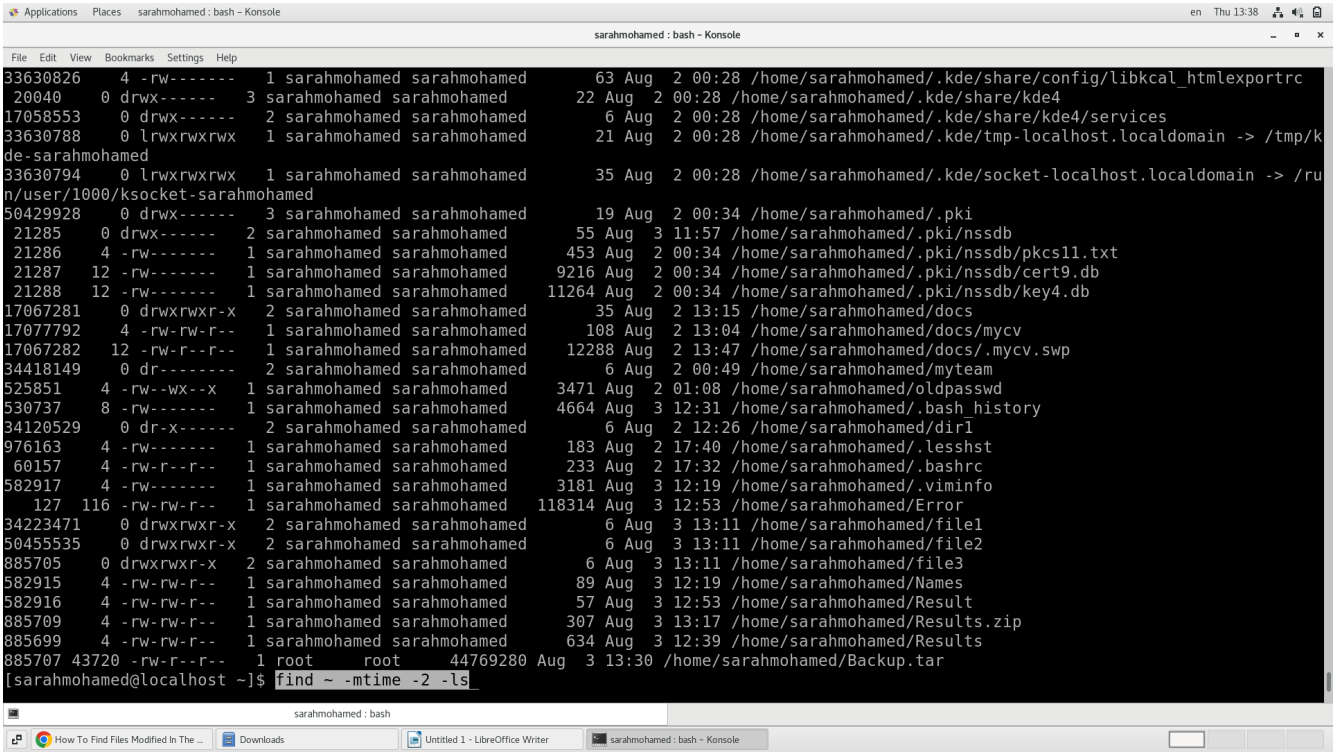
=> `gzip` provides better compression and decompression speeds than `compress`.

2. What is the command used to view the content of a compressed file.
=> zcat, bzcat

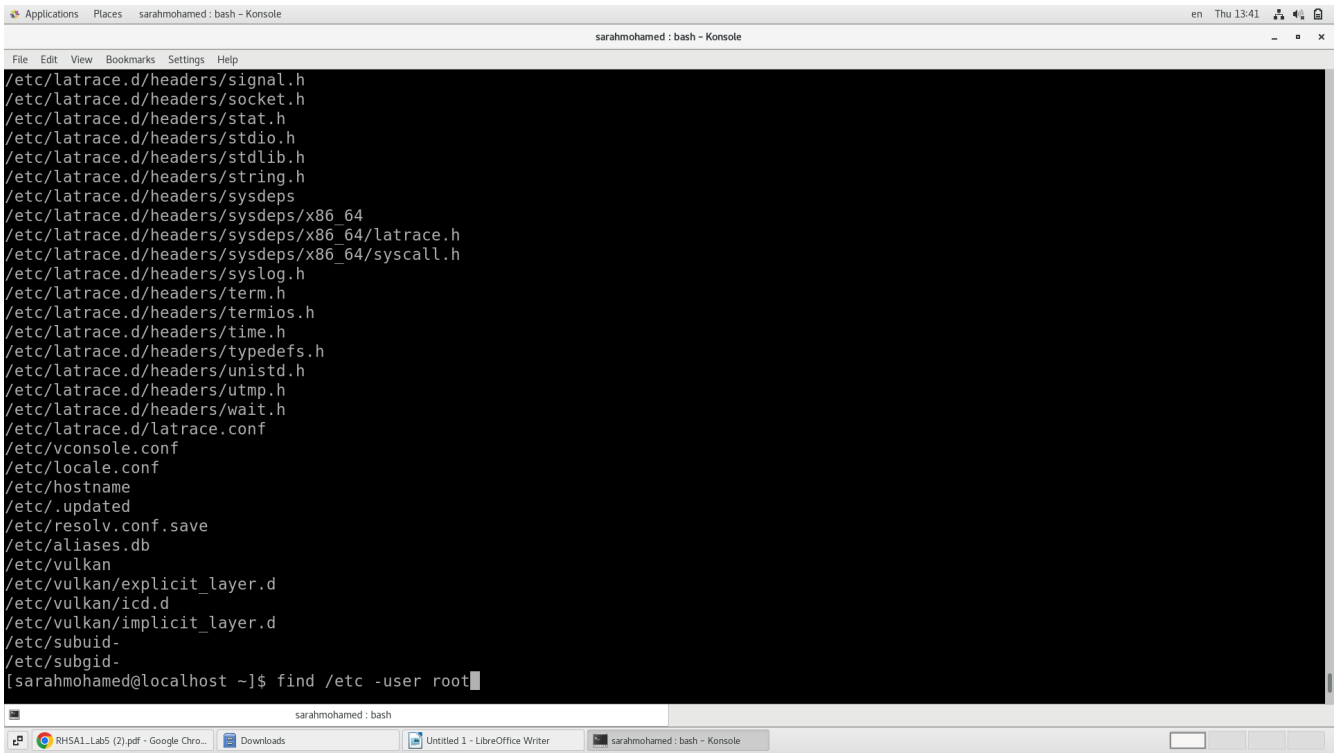
3. Backup /etc directory using tar utility.



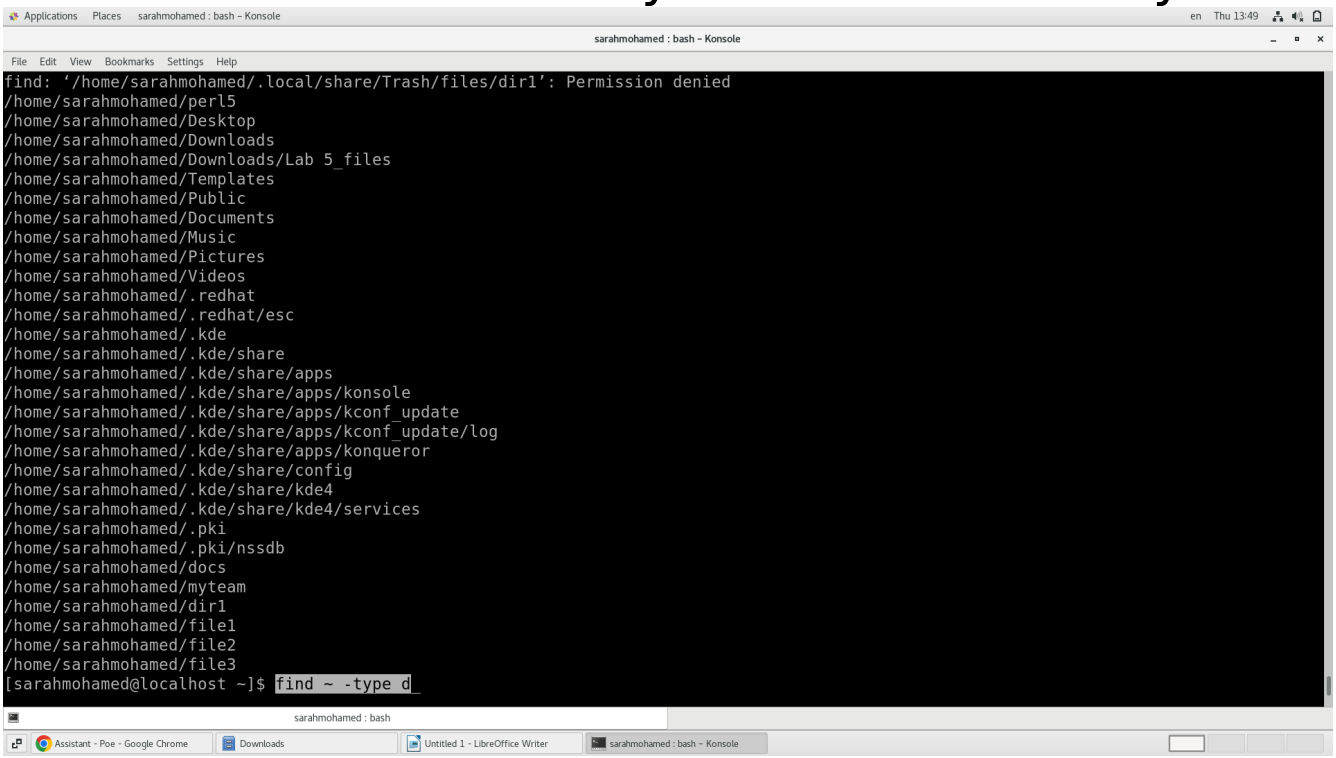
4. Starting from your home directory, find all files that were modified in the last two day.



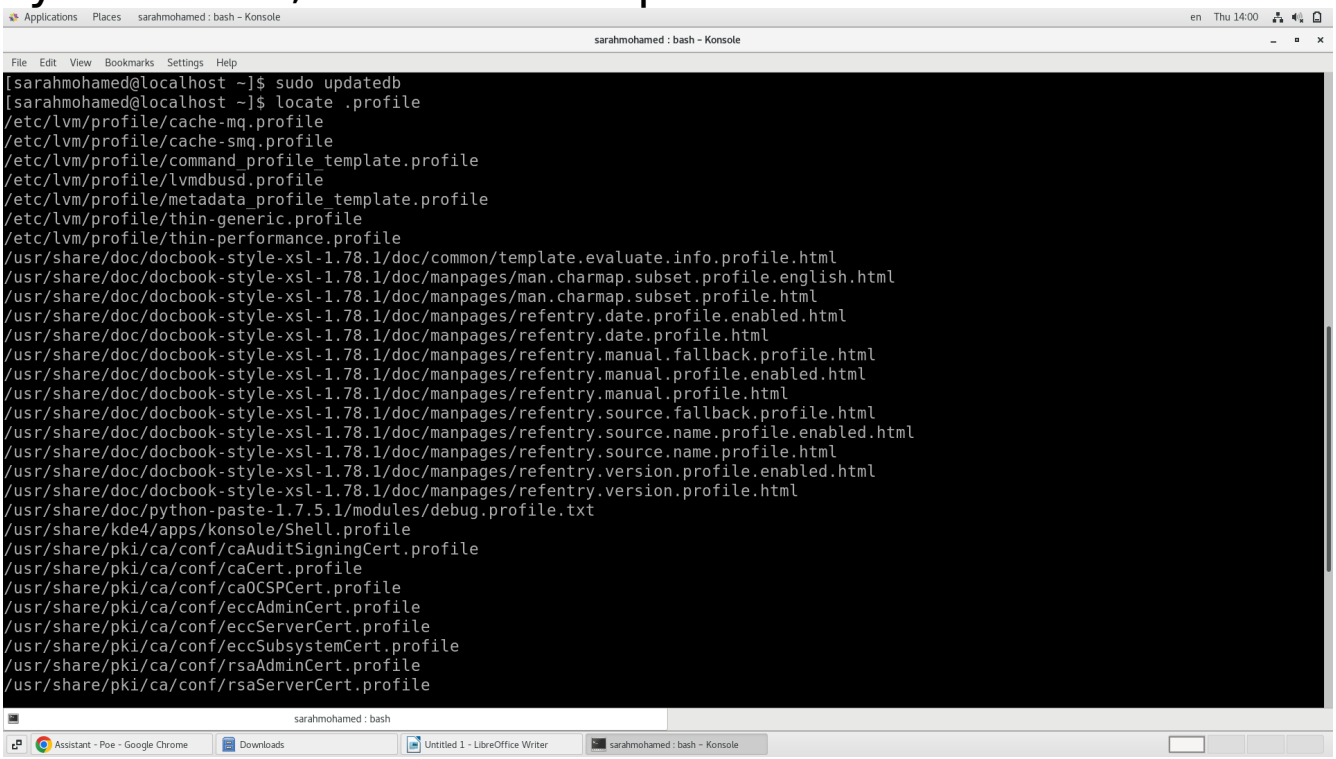
5. Starting from /etc, find files owned by root user.



6. Find all directories in your home directory.



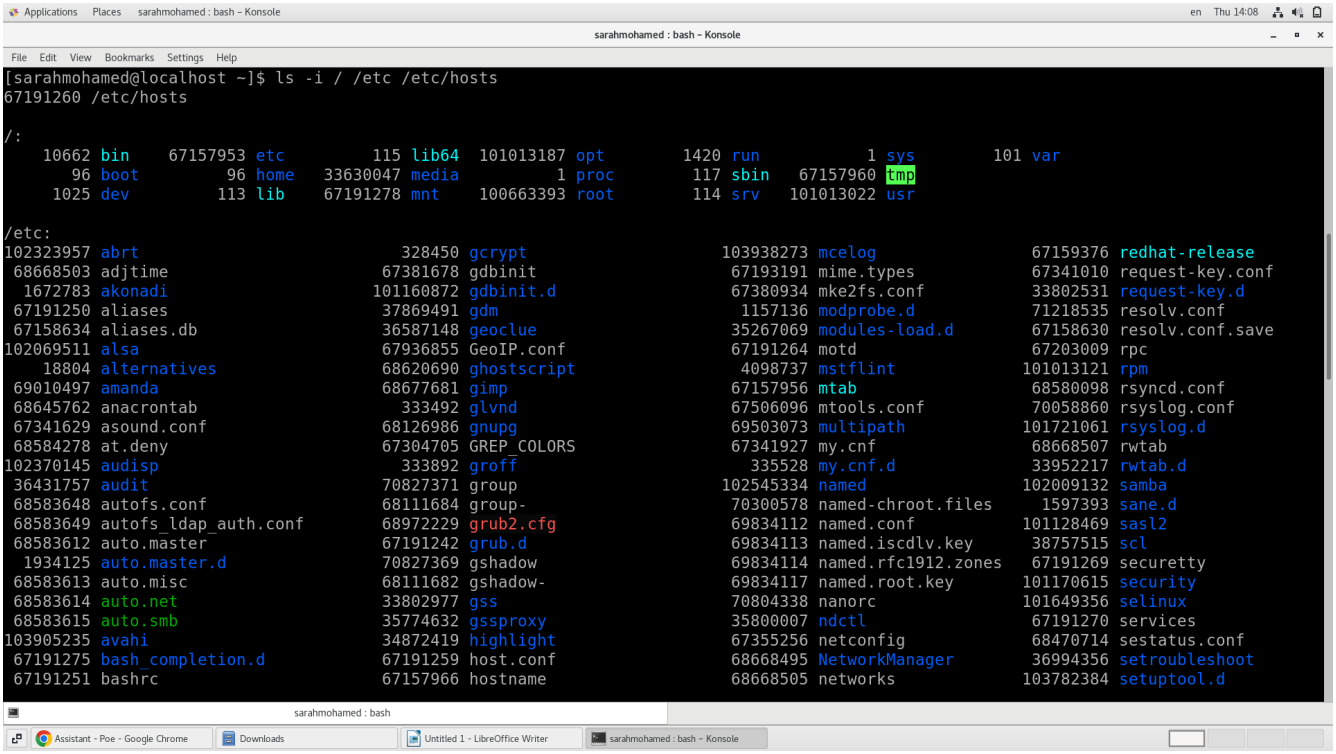
7. Write a command to search for all files on the system that, its name is ".profile".



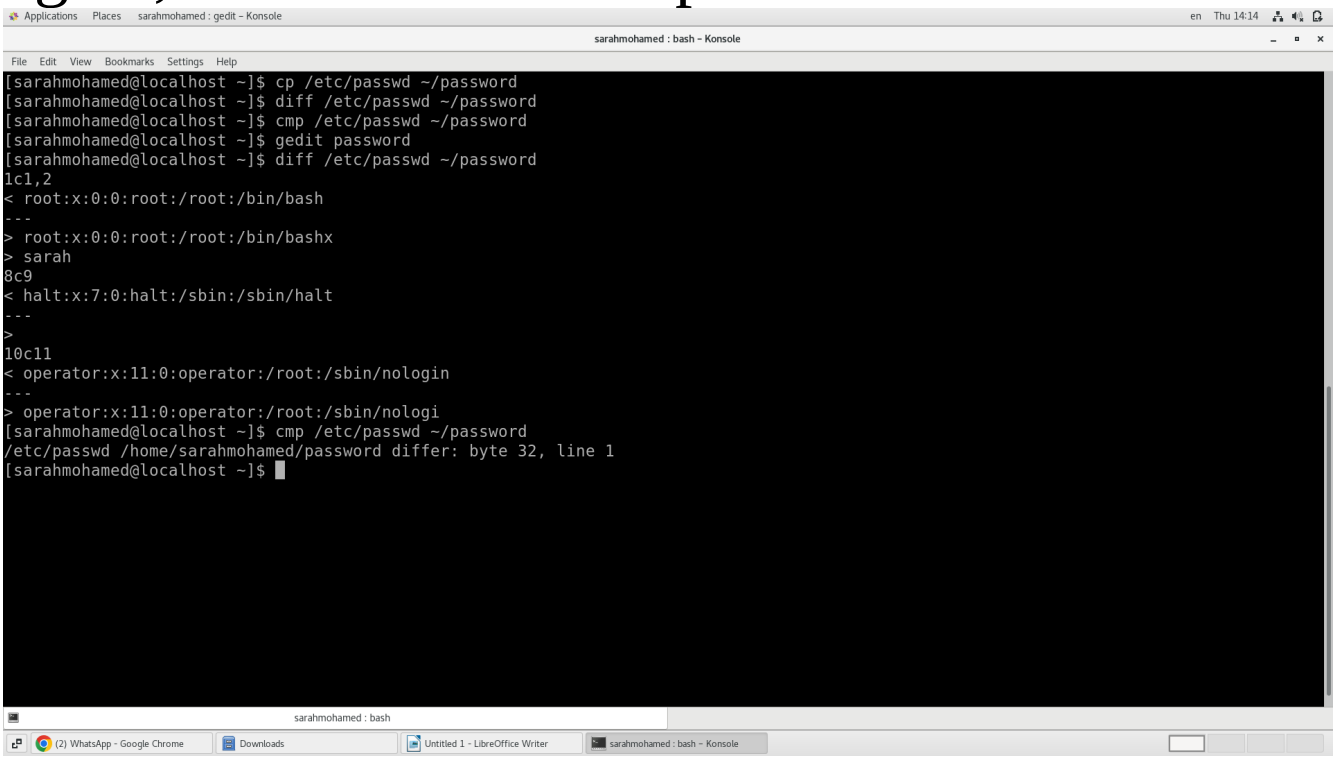
8. Identify the file types of the following: /etc/passwd, /dev/pts/0, /etc, /dev/sda

- `/etc/passwd`: This is a text file containing information about the system's users and is typically used for authentication.
- `/dev/pts/0`: This is a character device file representing a terminal.
- `/etc`: This is a directory containing system configuration files.
- `/dev/sda`: This is a block device file representing a hard disk drive.

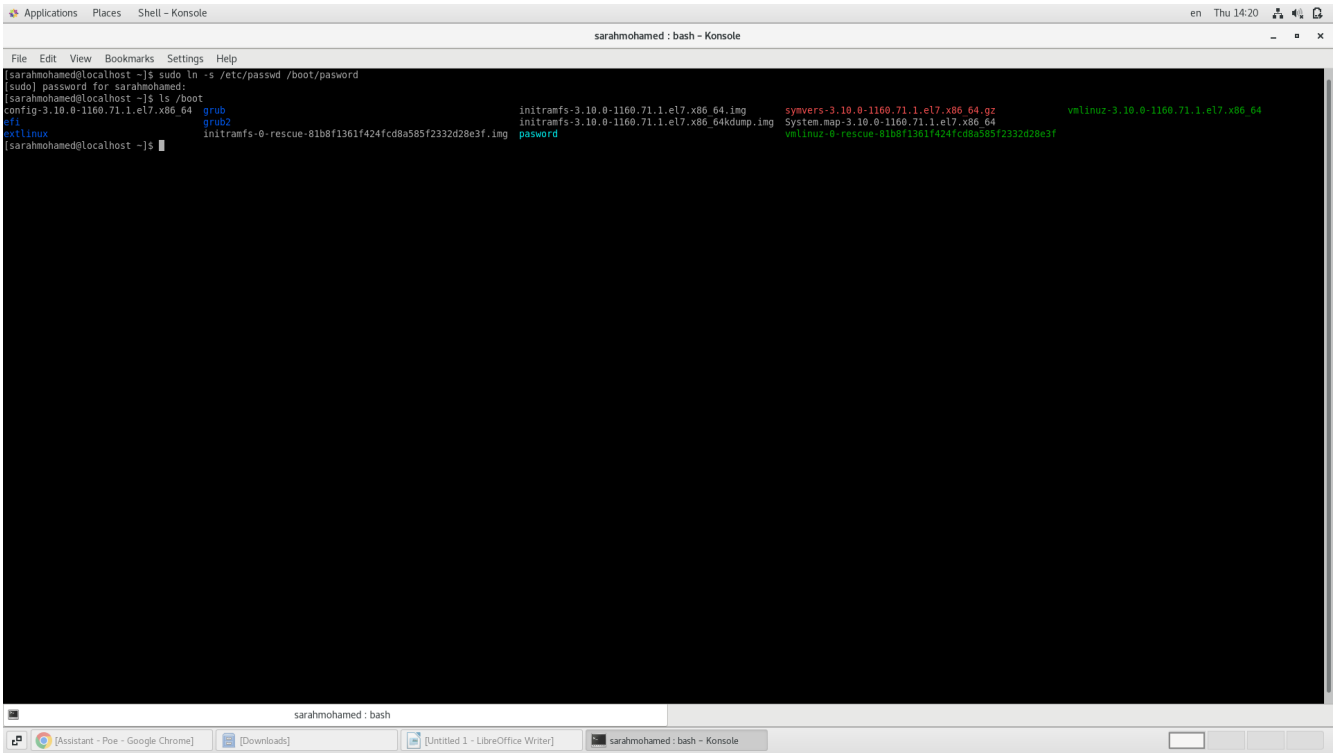
9. List the inode numbers of /, /etc, /etc/hosts



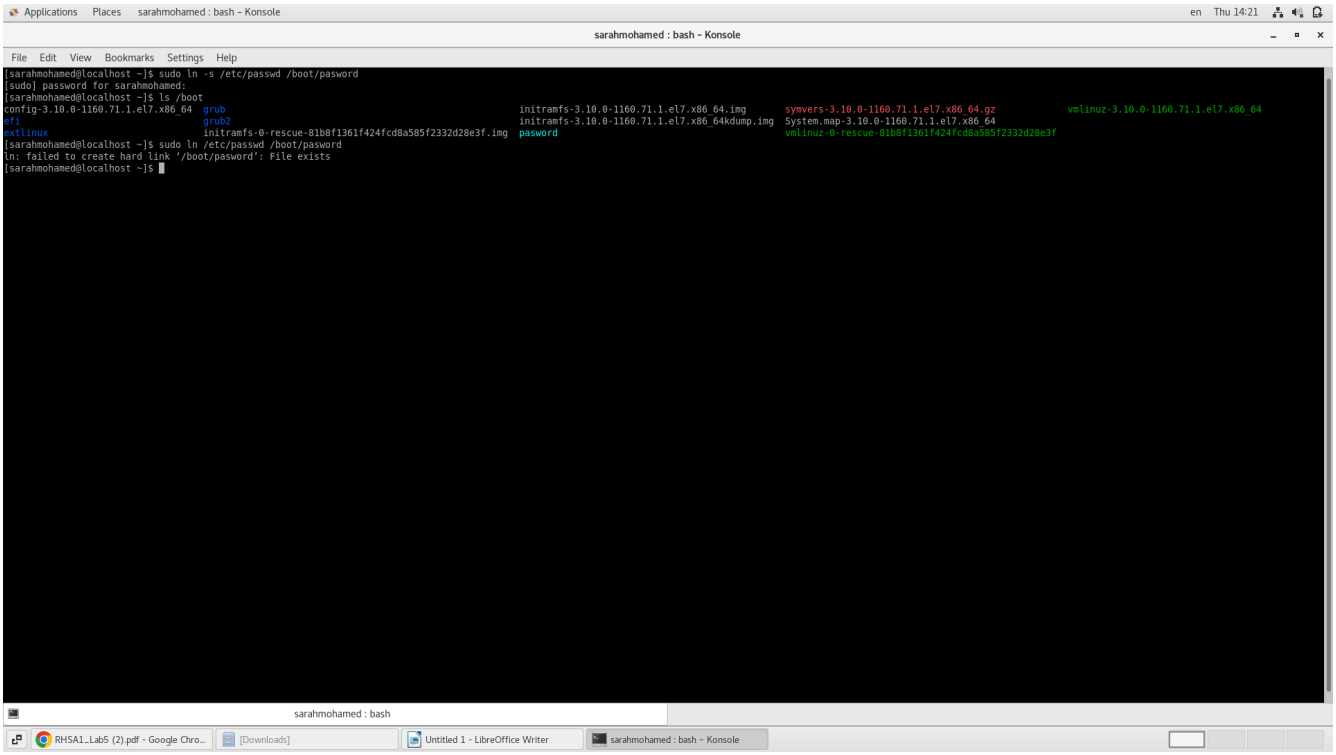
10. Copy /etc/passwd to your home directory, use the commands diff and cmp, and Edit in the file you copied, and then use these commands again, and check the output.



11. Create a symbolic link of /etc/passwd in /boot



12. Create a hard link of /etc/passwd in /boot. Could you? Why?



I cannot create a hard link of `/etc/passwd` in the `/boot` directory because hard links can only be created between files on the same file system, and `/etc` and `/boot` are typically on separate file systems.