CYSE 270: Linux System for Cybersecurity
Assignment 2

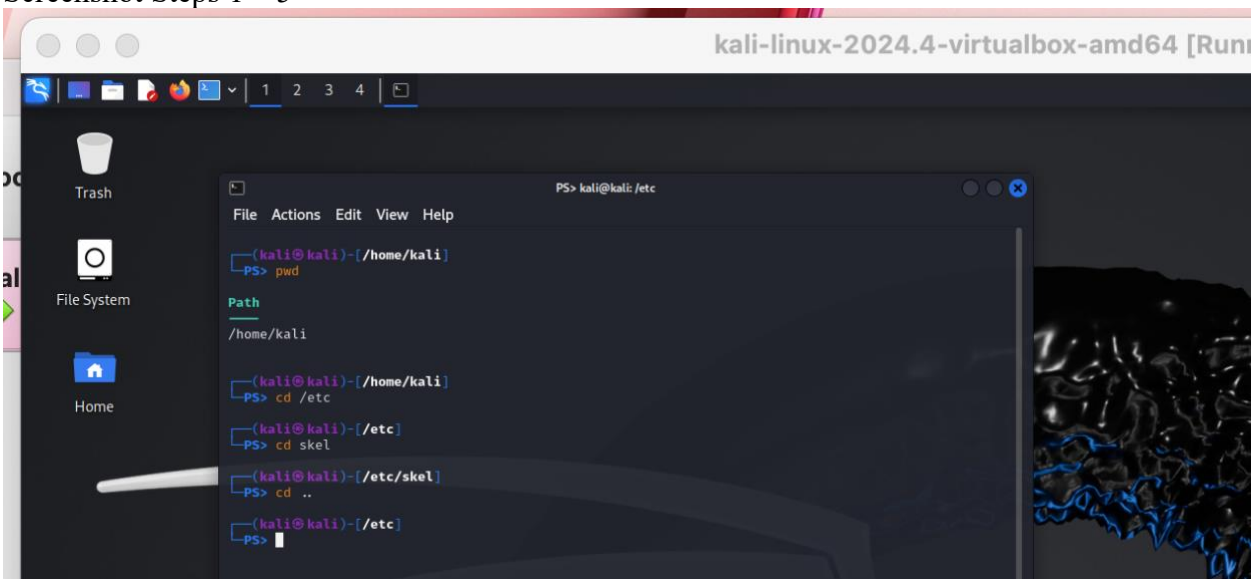
Steps 1-5: Opened my terminal, used command **pwd** to display my working directory. This helps me know where I am in the system. Then to switch to a different directory I used and absolute pathname **cd /etc**. For step four, I used a relative pathname to move into a different directory. The difference is before I used absolute and now I am using relative, **cd skel.** For step five, I used a relative pathname again to move up one directory, **cd ..** . Notice I went back into /etc directory seen in the terminal below as (kali@kali)-[/etc].

What is the difference between relative and absolute pathnames? I liked this image to explain.

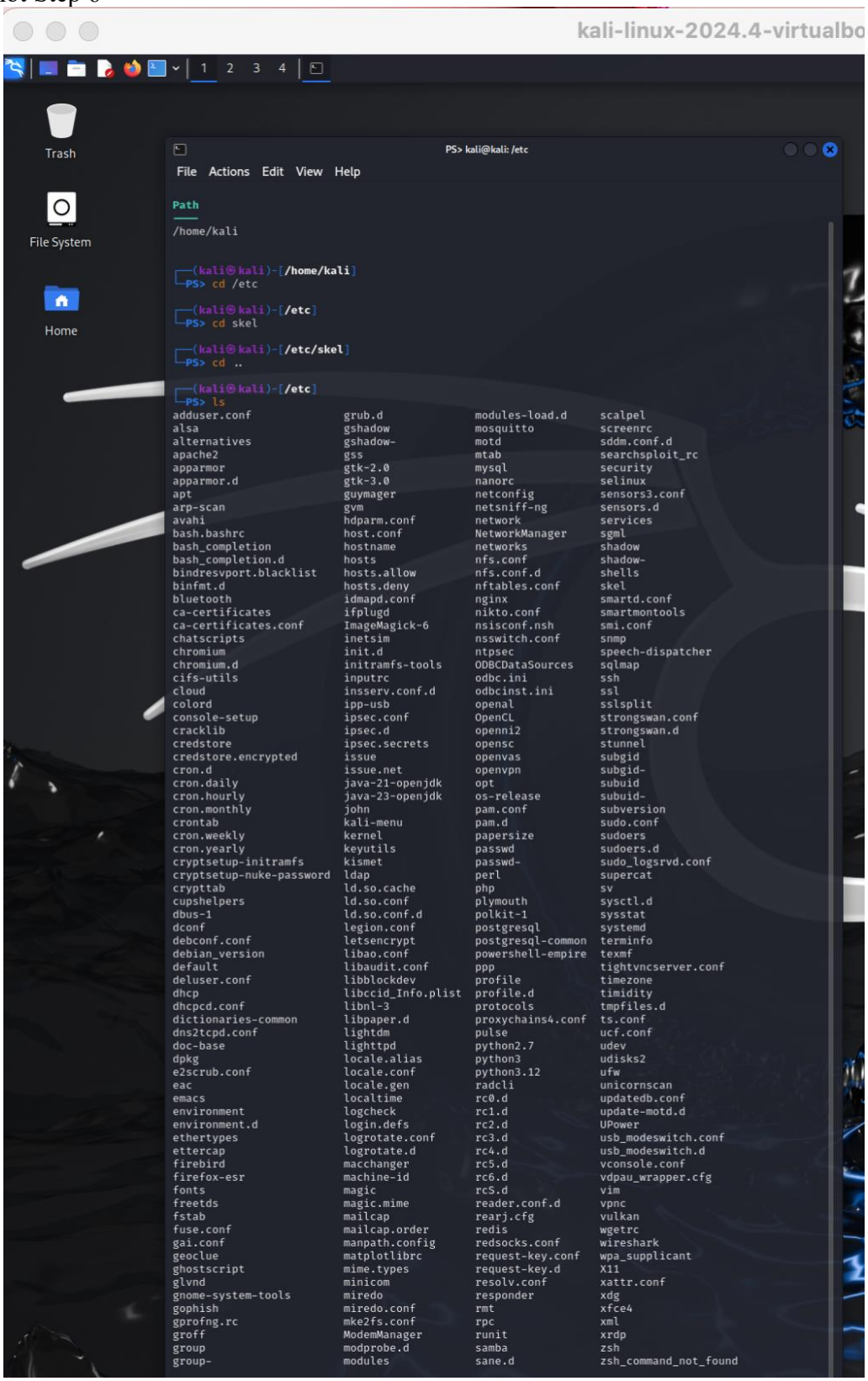
ABSOLUTE PATH
VERSUS
RELATIVE PATH

Absolute Path	Relative Path
It points to a specific location in the file system, irrespective of the current working directory.	It points to the location of a directory using current directory as a reference.
It is also referred to as full path or file path.	It is also referred to as non-absolute path.
It refers to the location of a file or directory (filesystem) relative to the root directory in Linux.	It refers to the location of a file or directory (filesystem) relative to the current directory.
Absolute URLs are used to link to other websites that are not located on the same domain.	Relative URLs are used to link to other websites that are located on the same domain.
For example: If your pictures are in C:\Sample\Pictures and index in C:\Sample\Index, then the absolute path for pictures is C:\Sample\Pictures.	For example: If your pictures are in C:\Sample\Pictures and index in C:\Sample\Index, the relative path is "..\Pictures". DifferenceBetween.net

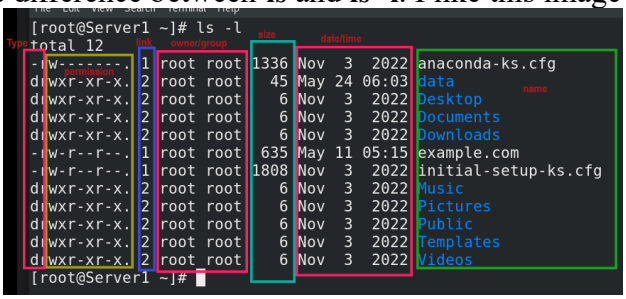
Screenshot Steps 1 – 5



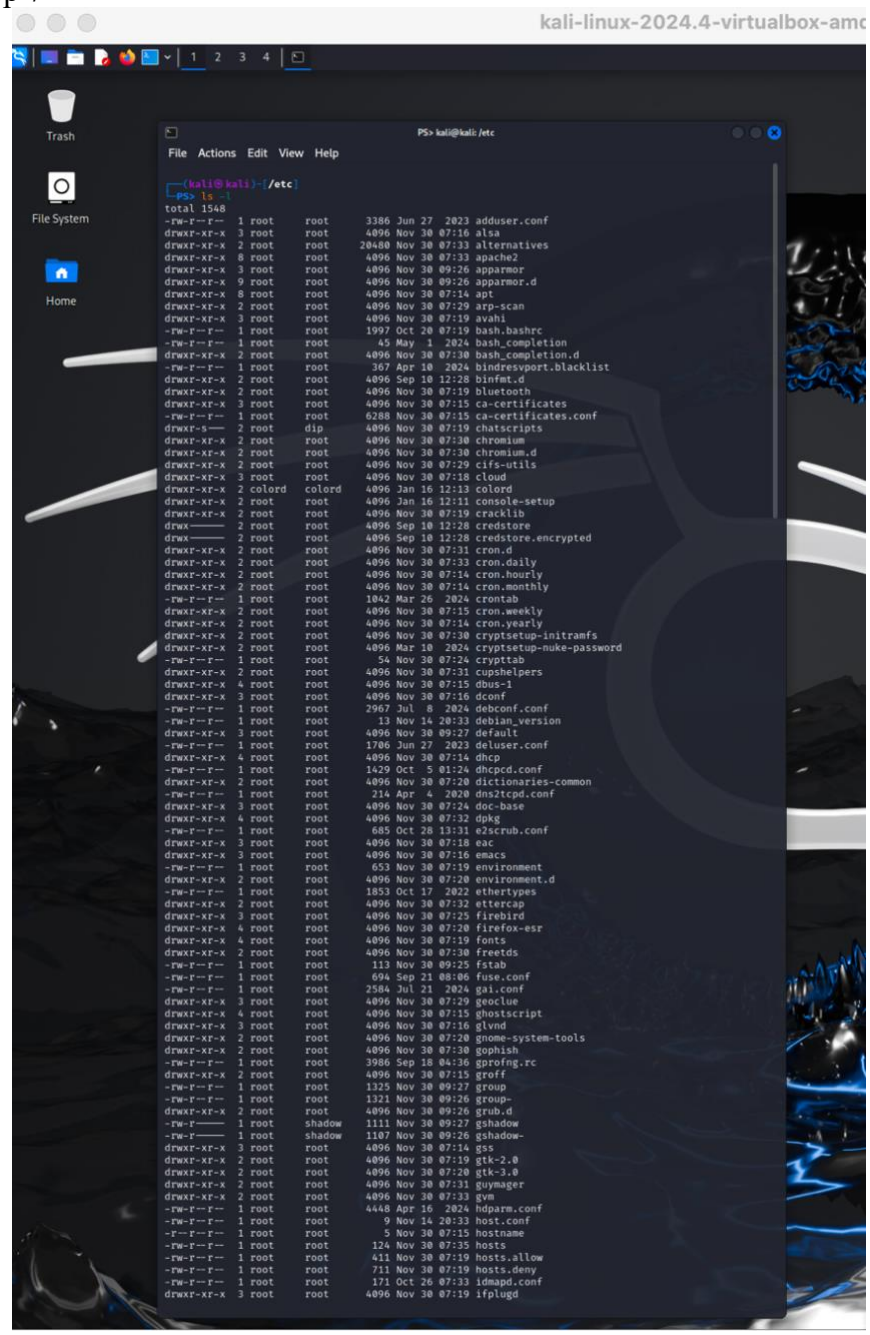
Step 6: I used the **ls** command to display the files in my cwd, my cwd at this time was /etc.
Screenshot Step 6



Step 7: I used the **ls -l** command to display a more detailed list of files in my cwd, my cwd at this time was /etc. Notice the difference between **ls** and **ls -l**. I like this image to remember.



Screenshot Step 7



Step 8: I needed a list of all the files within /etc that started with s. I used the command **ls -d s*** . I enjoyed this reference for future reference.

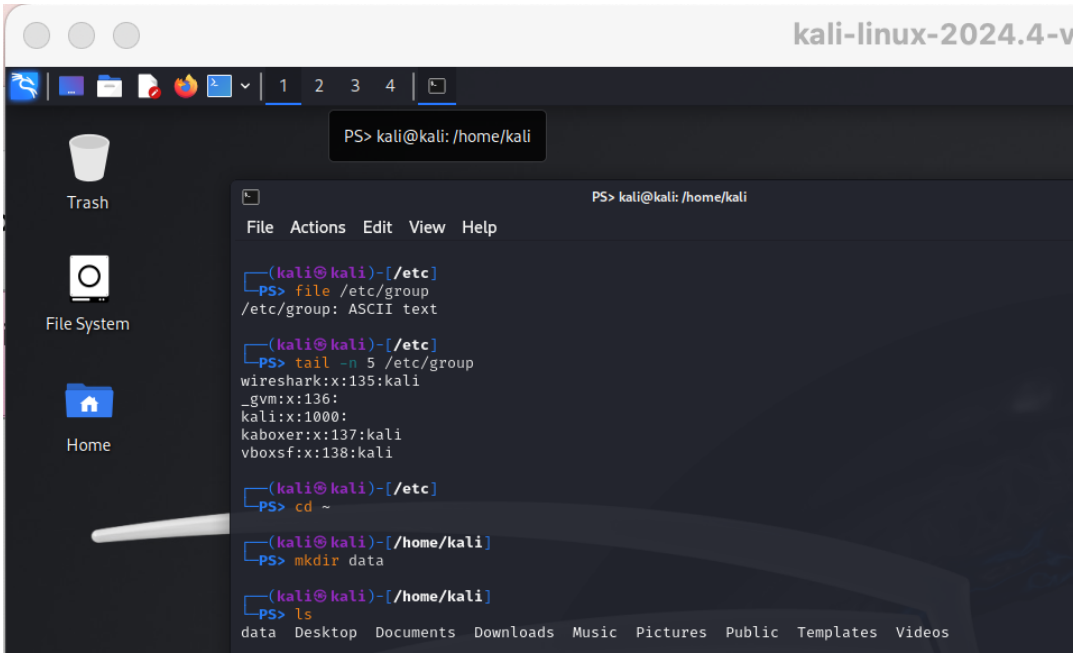
`ls`

The default directory list utility `ls` can be used in combination with the shell's wildcards . To search for all files with pattern `abc` :

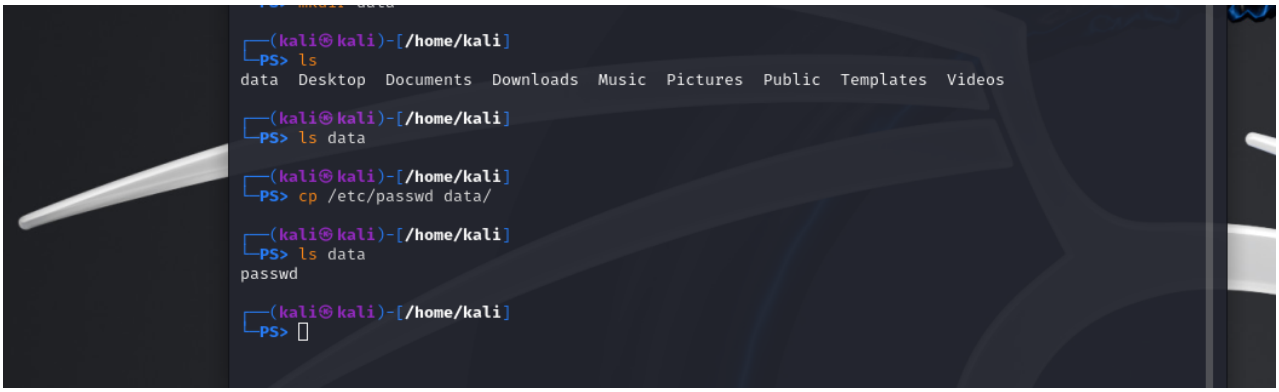
```
ls -d abc*   # list all files starting with abc---
ls -d *abc*  # list all files containing --abc--
ls -d *abc   # list all files ending with --abc
```

Screenshot Step 8

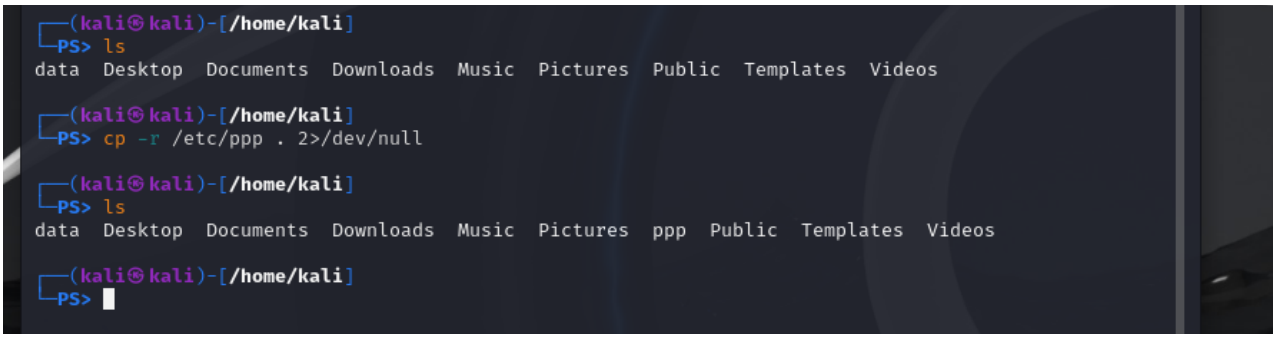
Step 9: I used command **file /etc/group** to determine the contents of the file.
Step 10: I used command **tail -n 5 /etc/group** to display the last five lines of the /etc/group file.
Step 11: I used command **cd ~** to return to my home directory.
Step 12: I made a directory named data in my cwd with command **mkdir data** and also checked if this command was successful by listing the directory in my cwd with the **ls** command.
Screenshot 9 – 12



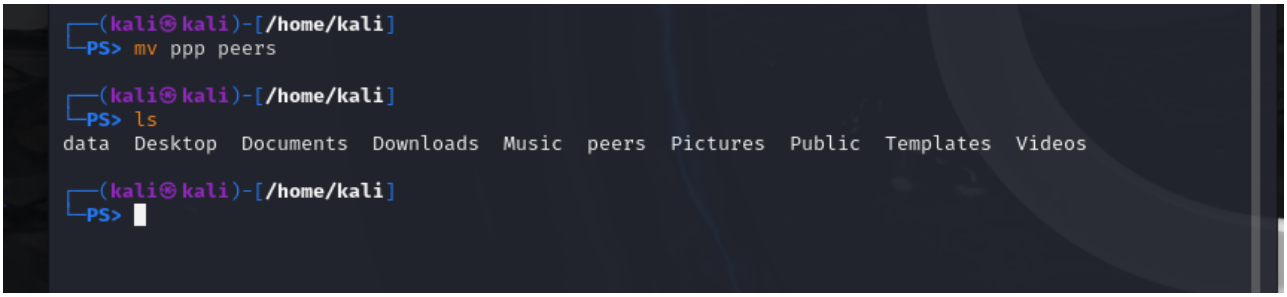
Step 13: I copied the /etc/passwd file into the data directory with command **cp /etc/passwd data/** and then used command **ls data** to double check if it worked.
Screenshot 13



Step 14: I copied the /etc/ppp directory into my cwd (cp -r /etc/ppp) and ignored and permission denied error messages (2>/dev/null) with command **cp -r /etc/ppp . 2>/dev/null**.
Screenshot 14



Step 15 – 16: I renamed the ppp directory in my cwd to peers and then double checked to verify the name change with command **mv ppp peers** and then **ls**.
Screenshot 15 – 16



Steps 17 – 20: To create a new empty file named test in the data directory I used command **touch data/test**. I check if it worked with the command **ls data**. To delete the data/passwd file I use command **rm data/passwd**. I then use command **ls data** to verify if it worked. To delete the peers directory I used command **rm -r peers**. I executed **ls** command to check for the removal.
Screenshot 17 – 20