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Lab Assignment 2-2 File System Management – Files and Directories Linux+ and LPIC-1

1. Create a directory in your home directory named: "Lab-Files". List the contents of your home directory to validate that the directory was created. Show the commands and results of these two steps.

```
u6397202@cois-linux:~$ mkdir ~/Lab-Files
u6397202@cois-linux:~$ ls ~
Lab-Files  public_html  sample1  sample2  sample3
```

2. Move all of the files in your home directory beginning with the word "sample" (created in Lab 2-1) to the "Lab-Files" directory. Issue the commands to show that this step was successful. Show all the commands and their results in the preceding steps.

```
u6397202@cois-linux:~$ mv ~/sample* ~/Lab-Files/
u6397202@cois-linux:~$ ls ~
Lab-Files  public_html
u6397202@cois-linux:~$ ls ~/Lab-Files
sample1  sample2  sample3
```

3. Use vi to create a file in your home directory called "helloworld" with at least two lines of content. Rename the file with the "mv" command to "testfile". Show the commands used.

```
u6397202@cois-linux:~$ vi ~/helloworld
u6397202@cois-linux:~$ mv ~/helloworld ~/testfile
u6397202@cois-linux:~$ ls ~
Lab-Files  public_html  testfile
```

4. Copy the "/etc/hosts" file to your home directory. Show the commands and results.

```
u6397202@cois-linux:~$ cp /etc/hosts ~/hosts
u6397202@cois-linux:~$ ls ~
hosts  Lab-Files  public_html  testfile
```

5. Copy the directory "~/Lab-Files" and all of its contents into directory ~/Back-ups". If "~/Back-ups" doesn't exist create it before you do the copy. Show all commands and results.

```
u6397202@cois-linux:~$ cp -r ~/Lab-Files ~/Back-ups
u6397202@cois-linux:~$ ls ~/Back-ups
sample1  sample2  sample3
u6397202@cois-linux:~$
```

6. Use the "alias" command with no arguments. Show your results.

```
u6397202@cois-linux:~$ alias
alias ls='ls --color=auto'
```

7. Remove the file "testfile" from your home directory. Show the results.

```
u6397202@cois-linux:~$ rm ~/testfile
u6397202@cois-linux:~$ ls ~
Back-ups  hosts  Lab-Files  public_html
```

8. Use the locate command to find files on the system beginning with “hosts.deny”.

```
u6397202@cois-linux:~$ locate hosts.deny
/etc/hosts.deny
/home/timeshift/snapshots/2023-05-24_10-29-42/localhost/etc/hosts.deny
/home/timeshift/snapshots/2023-05-24_10-29-42/localhost/usr/share/man/man5/hosts.deny.5.gz
/home/timeshift/snapshots/2023-06-02_11-07-15/localhost/etc/hosts.deny
/home/timeshift/snapshots/2023-06-02_11-07-15/localhost/usr/share/man/man5/hosts.deny.5.gz
/usr/share/man/man5/hosts.deny.5.gz
```

9. Use the find command to list all of the files in the /etc directory beginning with the string “hosts”.

```
u6397202@cois-linux:~$ find /etc -name "hosts*"
find: ‘/etc/audit’: Permission denied
find: ‘/etc/polkit-1/localauthority’: Permission denied
/etc/hosts.deny
find: ‘/etc/ssl/localcerts’: Permission denied
find: ‘/etc/ssl/private’: Permission denied
/etc/hosts.allow
/etc/hosts
find: ‘/etc/chatscripts’: Permission denied
find: ‘/etc/lvm/backup’: Permission denied
find: ‘/etc/ppp/peers’: Permission denied
/etc/avahi/hosts
find: ‘/etc/audisp’: Permission denied
```

10. Use the find command to identify all of the directories in the “/home” directory. Show the results.

```
find: ‘/home/fkumi’: Permission denied
/home/.Trash-0
find: ‘/home/.Trash-0’: Permission denied
/home/kgafford
find: ‘/home/kgafford’: Permission denied
/home/jharris
find: ‘/home/jharris’: Permission denied
/home/rjohnson
find: ‘/home/rjohnson’: Permission denied
/home/balex
find: ‘/home/balex’: Permission denied
/home/khernandez
find: ‘/home/khernandez’: Permission denied
/home/test
find: ‘/home/test’: Permission denied
/home/khagan
find: ‘/home/khagan’: Permission denied
/home/itsc63974
find: ‘/home/itsc63974’: Permission denied
/home/femi
find: ‘/home/femi’: Permission denied
/home/archives
find: ‘/home/archives’: Permission denied
/home/jwade
find: ‘/home/jwade’: Permission denied
```

11. Show a list of directories contained in the variable PATH. Is your personal home directory listed in your path?

```
u6397202@cois-linux:~$ echo $PATH
/usr/local/bin:/usr/bin:/bin:/usr/local/games:/usr/games
```

12. Use the which command to locate the "egrep" utility. Show your results.

```
u6397202@cois-linux:~$ which egrep
/bin/egrep
```

13. Create a link to the /etc/hosts file in your home directory. Issue the ls –l command to show the results.

```
u6397202@cois-linux:~$ ln -s /etc/hosts ~/myhosts
u6397202@cois-linux:~$ ls -l
total 24
drwxr-xr-x 2 u6397202 u6397202  4096 Jul  7 20:28 Back-ups
-rw-r--r-- 1 u6397202 u6397202     0 Jul  7 22:35 file1
-rw-r--r-- 1 u6397202 u6397202   313 Jul  7 20:27 hosts
drwxr-xr-x 2 u6397202 u6397202  4096 Jul  7 19:42 Lab-Files
lrwxrwxrwx 1 u6397202 u6397202    10 Jul  7 22:54 myhosts -> /etc/hosts
drwxr-xr-x 2 u6397202 itsc63972 4096 May 24 10:18 public_html
-rwxr--r-- 1 u6397202 u6397202    12 Jul  7 22:38 script1
drwxrwxrwt 2 u6397202 u6397202  4096 Jul  7 22:46 sDir
-rwsr-sr-x 1 u6397202 u6397202     0 Jul  7 22:46 sFile
-rwxrw-r-- 1 u6397202 u6397202     0 Jul  7 22:41 test1
```

14. Create a soft link to the /etc/passwd file in your home directory. Use the ls –l command to show the results.

```
6397202@cois-linux:~$ ln -s /etc/passwd ~/mypasswd
6397202@cois-linux:~$ ls -l
otal 24
rwxr-xr-x 2 u6397202 u6397202  4096 Jul  7 20:28 Back-ups
rw-r--r-- 1 u6397202 u6397202     0 Jul  7 22:35 file1
rw-r--r-- 1 u6397202 u6397202   313 Jul  7 20:27 hosts
rwxr-xr-x 2 u6397202 u6397202  4096 Jul  7 19:42 Lab-Files
rwxrwxrwx 1 u6397202 u6397202    10 Jul  7 22:54 myhosts -> /etc/hosts
rwxrwxrwx 1 u6397202 u6397202    11 Jul  7 22:54 mypasswd -> /etc/passwd
rwxr-xr-x 2 u6397202 itsc63972 4096 May 24 10:18 public_html
rwxr--r-- 1 u6397202 u6397202    12 Jul  7 22:38 script1
rwxrwxrwt 2 u6397202 u6397202  4096 Jul  7 22:46 sDir
rwsr-sr-x 1 u6397202 u6397202     0 Jul  7 22:46 sFile
rwxrw-r-- 1 u6397202 u6397202     0 Jul  7 22:41 test1
```