**Birzeit University**

**Computer Science Department**

**Linux OS Laboratory COMP311**

**Lab 6**

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You may redirect the input to come from the file message you created earlier as follows:

tr “a-z” “A-Z” < message

What was the output?

**THIS IS MY MESSAGE FILE**

**GOODBYE**

Run the following command:

tr “a-z” “A-Z” << !

hello

how are you

hope well

bye

!

What did you get as output?

**HELLO**

**HOW ARE YOU**

**HOPE WELL**

**BYE**

Now type the following command: echo hello > /dev/pts/5

What happened? Explain.

**it sends "hello" to the second terminal with pts/5.**

Run the following command:

Cp

What did you get displayed? **cp: missing file operand** .

Is that output or error? **error**.

Now run the command:

cp > cpfile

What happened? **the same message got displayed on the screen**.

To redirect error we need to use the (>) character so to distinguish it from redirecting error, we must specify the file descriptor before the > character as follows:

cp 2> cpfile

What happened now?

**Nothing displayed on the screen.**

Check the contents of file cpfile. What did you find?

**cp: missing file operand,** **the same message got displayed on the screen.**

Try the following command:

find / -name passwd -print

What did you get? Was that output or error? **Path of the passwd file, output.**

Now run the command as follows:

find / -name passwd -print 2> errors

What did you get now? **The output (path).**

Check file errors content. **Empty**.

Now run the command as follows:

find / -name passwd -print > output 2> error

What happened?

**it redirects the output to the "output" file and redirects errors to the "error" file (empty in my case).**

Run the following command:

cat /etc/passwd | grep yourusername | cut -d: -f5 | cut -d\_ -f1

**What did you get? My user name (root).**

What command would you use to get your group number from /etc/passwd:

**cat /etc/passwd | grep "^root" | cut -d: -f4**

What command would you use to get your login time from the who command?

( Hint: use the tr command with the squeeze option )

**who | grep root | tr -s ' ' | cut -d' ' -f4**

What command would you use to get the default group name for any given user?

**cat /etc/group | grep :$( cat /etc/passwd | grep "^username" | cut -d: -f4 ):$ | cut -d: -f1**

Try the following command:

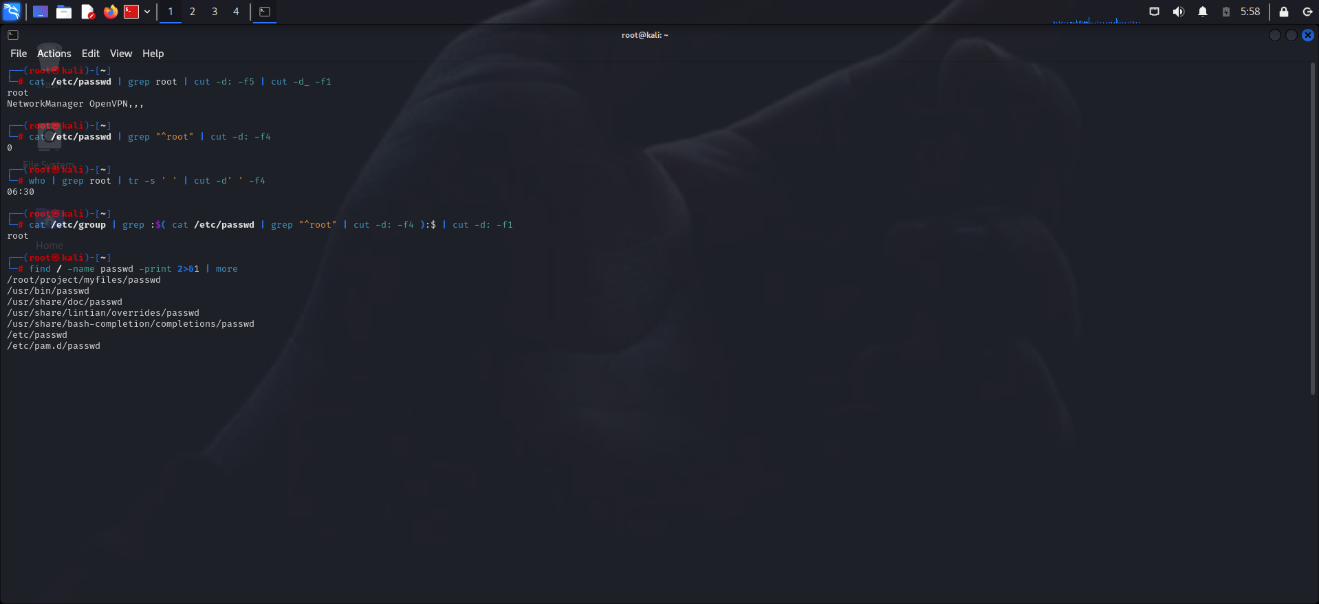
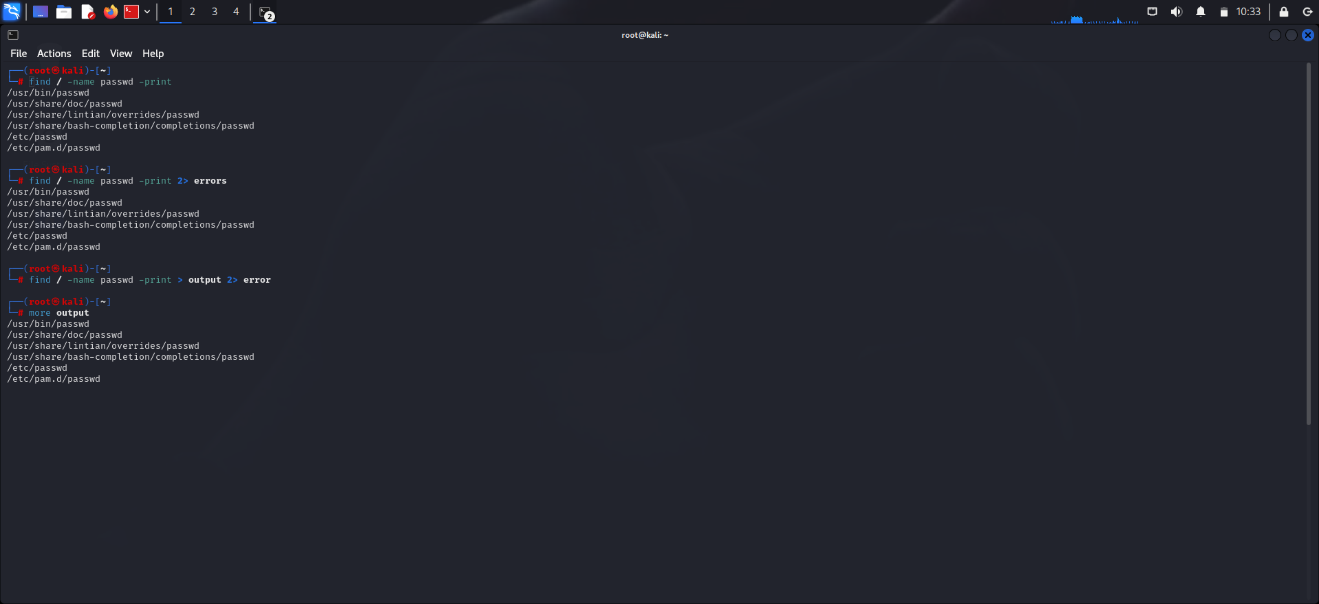
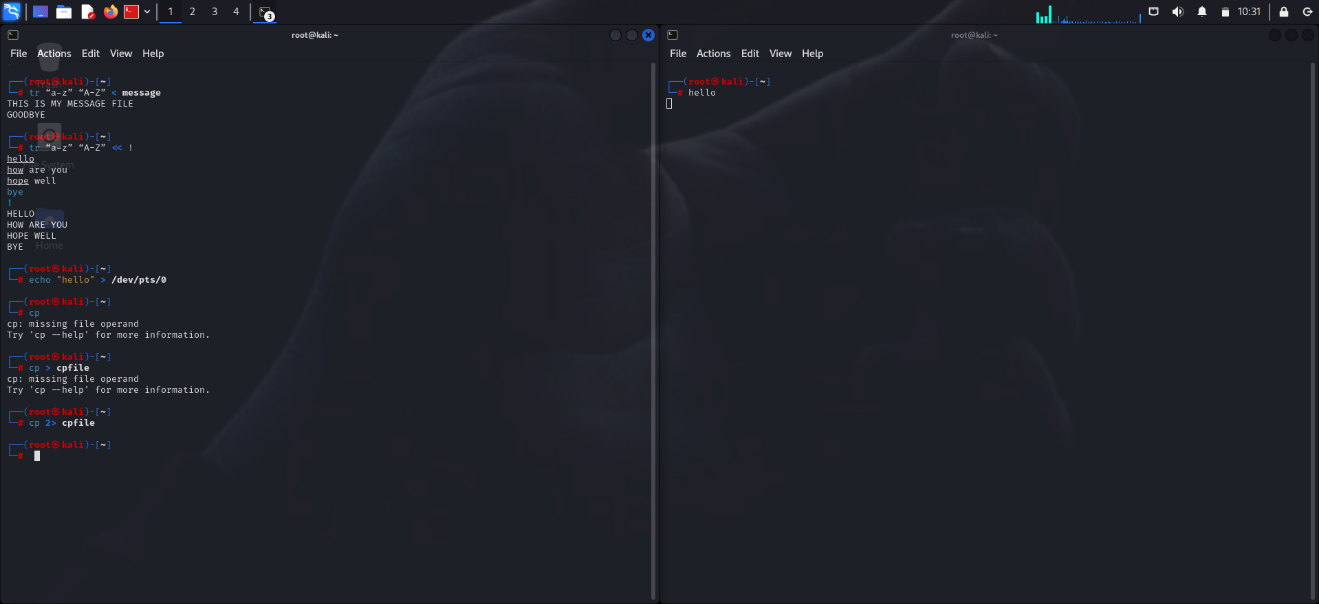
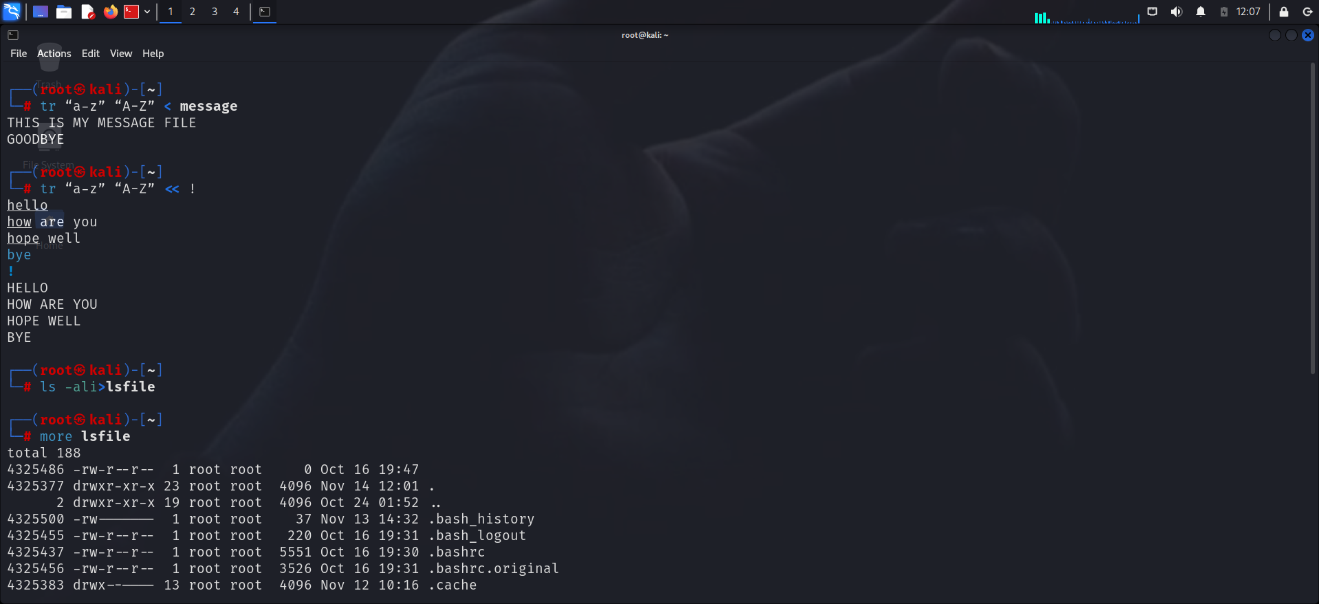
find / -name passwd -print | more

**What happened? Why is the result of the command not filtered by more?**

The outputs not filtered by more

How can we fix this?

**find / -name passwd -print 2>&1 | more**

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