Lab 1 Solutions with Commands

## 2. Difference between cat and more

echo "cat: display the file content" > file\_diffination

echo "more: reads files and display the text one screen at a time" >> file\_diffination

cat file\_diffination

## 3. Difference between rm and rmdir

echo "rm=remove files or directories even if they are not empty" > testfilerm

echo "rmdir= remove empty directories only" >> testfilerm

cat testfilerm

## 4. Directory Hierarchy

# Create structure

mkdir -p dir1/dir11 dir1/dir12 docs

touch dir1/dir11/file1 docs/mycv

# Remove dir11

rm dir1/dir11/file1

rmdir dir1/dir11

# Remove dir12 and parent dir1

rmdir -p dir1/dir12

# Paths for mycv:

Absolute: /home/student/docs/mycv

Relative: docs/mycv

## 5–6. Copy and Rename /etc/passwd

cp /etc/passwd ~/mypasswd

mv ~/mypasswd ~/oldpasswd

ls ~ | grep oldpasswd

## 7. Four Ways to Return Home

cd ~

cd /home/student

cd $HOME

cd

## 8. List Commands Starting with 'w'

ls /usr/bin/w\*

## 9–10. View /etc/passwd Head/Tail

head -n 4 /etc/passwd

tail -n 7 /etc/passwd

## 11–12. View passwd Man Pages

man passwd; man 5 passwd

man 5 passwd

## 14. Create CV with vi

vi docs/mycv

Inside vi:

[student@192 ~]$ cat mycv

\*\*Curriculum Vitae (CV)\*\*

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## 15. vi Navigation in mycv

a. Move down: j

b. Move up: k

c. Search "age": /age → Enter

d. Jump to line 5: :5 → Enter

e. Delete current line + line 5: dd then :5d

f. End of line + insert mode: A

## 16. List Available Shells

cat /etc/shells

# Reviewed Linux Commands with Output

[student@localhost ~]$ ls  
 Admin Downloads Music Public System user\_list.txt  
 Desktop first.txt Nti\_file quiz1.eval2 'System Admin' Videos  
 Documents Links Pictures quiz2.eval2 Templates

[student@localhost ~]$ echo Dispaly the file content > Nti\_file

[student@localhost ~]$ cat Nti\_file

Dispaly the file content

[student@localhost ~]$ touch nti\_file2

[student@localhost ~]$ echo reads files and display the text one screen at a time > nti\_file2

[student@localhost ~]$ cat nti\_file2

reads files and display the text one screen at a time

[student@localhost ~]$ more nti\_file2

reads files and display the text one screen at a time

[student@localhost ~]$ ls  
 Admin first.txt nti\_file2 quiz2.eval2 user\_list.txt  
 Desktop Links Pictures System Videos  
 Documents Music Public 'System Admin'  
 Downloads Nti\_file quiz1.eval2 Templates

[student@localhost ~]$ man rm

[student@localhost ~]$ mkdir testdir\_nti

[student@localhost ~]$ touch testfilerm

[student@localhost ~]$ touch testdir\_nti/file1

[student@localhost ~]$ ls  
 Admin first.txt nti\_file2 quiz2.eval2 testdir\_nti  
 Desktop Links Pictures System testfilerm  
 Documents Music Public 'System Admin' user\_list.txt  
 Downloads Nti\_file quiz1.eval2 Templates Videos

[student@localhost ~]$ cat testdir\_nti  
cat: testdir\_nti: Is a directory

[student@localhost ~]$ cd /testdir\_nti  
bash: cd: /testdir\_nti: No such file or directory

[student@localhost ~]$ cd /testfilerm  
bash: cd: /testfilerm: No such file or directory

[student@localhost ~]$ rmdir testdir\_nti  
rmdir: failed to remove 'testdir\_nti': Directory not empty

[student@localhost ~]$ ls  
 Admin first.txt nti\_file2 quiz2.eval2 testdir\_nti  
 Desktop Links Pictures System testfilerm  
 Documents Music Public 'System Admin' user\_list.txt  
 Downloads Nti\_file quiz1.eval2 Templates Videos

[student@localhost ~]$ rm -r testdir\_nti

[student@localhost ~]$ ls  
 Admin first.txt nti\_file2 quiz2.eval2 testfilerm  
 Desktop Links Pictures System user\_list.txt  
 Documents Music Public 'System Admin' Videos  
 Downloads Nti\_file quiz1.eval2 Templates

[student@localhost ~]$ mkdir emptydir

[student@localhost ~]$ rmdir emptydir

[student@localhost ~]$ mkdir emptydir

[student@localhost ~]$ ls  
 Admin emptydir Nti\_file quiz1.eval2 Templates  
 Desktop first.txt nti\_file2 quiz2.eval2 testfilerm  
 Documents Links Pictures System user\_list.txt  
 Downloads Music Public 'System Admin' Videos

[student@localhost ~]$ rmdir emptydir

[student@localhost ~]$ ls  
 Admin first.txt nti\_file2 quiz2.eval2 testfilerm  
 Desktop Links Pictures System user\_list.txt  
 Documents Music Public 'System Admin' Videos  
 Downloads Nti\_file quiz1.eval2 Templates

[student@localhost ~]$ echo rm=remove files or directories even if they are not empty rmdir= remove empty director only > testfilerm

[student@localhost ~]$ cat testfilerm

rm=remove files or directories even if they are not empty rmdir= remove empty director only

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$ cd ~

[student@localhost ~]$ mk  
  
  
  
  
bash: mk: command not found...

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$ nano file

[student@localhost ~]$ cat file\_diffination  
cat: display the file content  
more: reads files and display the text one screen at a time  
rm : removes files or non-empty directories with -r

rmdir only removes empty directories

[student@localhost ~]$ mkdir -p dir1/dir11

[student@localhost ~]$ mkdir dir1/dir12

[student@localhost ~]$ mkdir -p docs

[student@localhost ~]$ touch dir1/dir11/file1

[student@localhost ~]$ touch docs/mycv

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$ ls -R dir1  
dir1:

dir11 dir12

dir1/dir11:

file1

dir1/dir12:

[student@localhost ~]$ ls -R docs  
docs:

mycv

[student@localhost ~]$

[student@localhost ~]$ rmdir dir1/dir11  
rmdir: failed to remove 'dir1/dir11': Directory not empty

[student@localhost ~]$ rm dir1/dir11/file1

[student@localhost ~]$ rmdir dir1/dir11

[student@localhost ~]$

[student@localhost ~]$ ls -R dir1  
dir1:

dir12

dir1/dir12:

[student@localhost ~]$

[student@localhost ~]$ rmdir -p dir1/dir12

[student@localhost ~]$ ls -R dir1  
ls: cannot access 'dir1': No such file or directory

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$ pwd

/home/student

[student@localhost ~]$ /home/student/docs/mycv  
bash: /home/student/docs/mycv: Permission denied

[student@localhost ~]$ ls -R docs  
docs:

mycv

[student@localhost ~]$ docs/mycv  
bash: docs/mycv: Permission denied

[student@localhost ~]$ cat docs/mycv

[student@localhost ~]$ ls docs/mycv

docs/mycv

[student@localhost ~]$ ls -l docs

total 0

-rw-rw-r--. 1 student student 0 Apr 5 09:00 mycv

[student@localhost ~]$ sudo /home/student/docs/mycv  
[sudo] password for student:  
sudo: /home/student/docs/mycv: command not found

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$ cp /etc/passwd ~/mypasswd

[student@localhost ~]$ ls ~ | grep mypasswd

mypasswd

[student@localhost ~]$ cat ~/mypasswd  
root:x:0:0:root:/root:/bin/bash  
bin:x:1:1:bin:/bin:/sbin/nologin  
daemon:x:2:2:daemon:/sbin:/sbin/nologin  
adm:x:3:4:adm:/var/adm:/sbin/nologin  
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin  
sync:x:5:0:sync:/sbin:/bin/sync  
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown  
halt:x:7:0:halt:/sbin:/sbin/halt  
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin  
operator:x:11:0:operator:/root:/sbin/nologin  
games:x:12:100:games:/usr/games:/sbin/nologin  
ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin  
nobody:x:65534:65534:Kernel Overflow User:/:/sbin/nologin  
systemd-coredump:x:999:997:systemd Core Dumper:/:/sbin/nologin  
dbus:x:81:81:System message bus:/:/sbin/nologin  
polkitd:x:998:996:User for polkitd:/:/sbin/nologin  
tss:x:59:59:Account used for TPM access:/dev/null:/sbin/nologin  
avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin  
rpc:x:32:32:Rpcbind Daemon:/var/lib/rpcbind:/sbin/nologin  
colord:x:997:993:User for colord:/var/lib/colord:/sbin/nologin  
clevis:x:996:992:Clevis Decryption Framework unprivileged user:/var/cache/clevis:/usr/sbin/nologin  
rtkit:x:172:172:RealtimeKit:/proc:/sbin/nologin  
sssd:x:995:991:User for sssd:/:/sbin/nologin  
geoclue:x:994:990:User for geoclue:/var/lib/geoclue:/sbin/nologin  
libstoragemgmt:x:993:989:daemon account for libstoragemgmt:/var/run/lsm:/sbin/nologin  
setroubleshoot:x:992:988:SELinux troubleshoot server:/var/lib/setroubleshoot:/sbin/nologin  
pipewire:x:991:986:PipeWire System Daemon:/var/run/pipewire:/sbin/nologin  
flatpak:x:990:985:User for flatpak system helper:/:/sbin/nologin  
gdm:x:42:42::/var/lib/gdm:/sbin/nologin  
cockpit-ws:x:989:984:User for cockpit web service:/nonexisting:/sbin/nologin  
cockpit-wsinstance:x:988:983:User for cockpit-ws instances:/nonexisting:/sbin/nologin  
gnome-initial-setup:x:987:982::/run/gnome-initial-setup/:/sbin/nologin  
rpcuser:x:29:29:RPC Service User:/var/lib/nfs:/sbin/nologin  
sshd:x:74:74:Privilege-separated SSH:/usr/share/empty.sshd:/sbin/nologin  
chrony:x:986:981::/var/lib/chrony:/sbin/nologin  
dnsmasq:x:985:980:Dnsmasq DHCP and DNS server:/var/lib/dnsmasq:/sbin/nologin  
tcpdump:x:72:72::/:/sbin/nologin  
systemd-oom:x:978:978:systemd Userspace OOM Killer:/:/usr/sbin/nologin  
student:x:1000:1000:student:/home/student:/bin/bash  
akram:x:1001:10::/home/akram:/bin/bash  
AKRAM1:x:1002:1000::/home/AKRAM1:/bin/bash  
AKRAM:x:1003:1000::/home/AKRAM:/bin/bash  
user1:x:1004:1004::/home/user1:/bin/bash  
user2:x:1005:1005::/home/user2:/bin/bash  
user3:x:1006:1006::/home/user3:/bin/bash

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$ mv ~/mypasswd ~/oldpasswd

[student@localhost ~]$ ls ~ |grep oldpasswd

oldpasswd

[student@localhost ~]$ ls ~  
 Admin file Nti\_file quiz1.eval2 testfilerm  
 Desktop file\_diffination nti\_file2 quiz2.eval2 user\_list.txt  
 docs first.txt oldpasswd System Videos  
 Documents Links Pictures 'System Admin'  
 Downloads Music Public Templates

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$ ~  
bash: /home/student: Is a directory

[student@localhost ~]$ cd /home/student

[student@localhost ~]$ cd

[student@localhost ~]$ cd $HOME

[student@localhost ~]$ cd

[student@localhost ~]$ student/bin  
bash: student/bin: No such file or directory

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$ ls /student/bin/w\*  
ls: cannot access '/student/bin/w\*': No such file or directory

[student@localhost ~]$ ls /student/w\*  
ls: cannot access '/student/w\*': No such file or directory

[student@localhost ~]$ ls /usr/bin/w\*

/usr/bin/w /usr/bin/wget /usr/bin/wireplumber

/usr/bin/wait /usr/bin/whatis /usr/bin/wnck-urgency-monitor

/usr/bin/wall /usr/bin/whatis.man-db /usr/bin/wpctl

/usr/bin/watch /usr/bin/whereis /usr/bin/wpexec

/usr/bin/watchgnupg /usr/bin/which /usr/bin/write

/usr/bin/wavpack /usr/bin/whiptail /usr/bin/wvgain

/usr/bin/wc /usr/bin/who /usr/bin/wvtag

/usr/bin/wdctl /usr/bin/whoami /usr/bin/wvunpack

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$ head -n 4 /etc/passwd  
root:x:0:0:root:/root:/bin/bash  
bin:x:1:1:bin:/bin:/sbin/nologin  
daemon:x:2:2:daemon:/sbin:/sbin/nologin  
adm:x:3:4:adm:/var/adm:/sbin/nologin

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$ tail -n /etc/passwd  
tail: invalid number of lines: ‘/etc/passwd’

[student@localhost ~]$ tail -n 7 /etc/passwd  
student:x:1000:1000:student:/home/student:/bin/bash  
akram:x:1001:10::/home/akram:/bin/bash  
AKRAM1:x:1002:1000::/home/AKRAM1:/bin/bash  
AKRAM:x:1003:1000::/home/AKRAM:/bin/bash  
user1:x:1004:1004::/home/user1:/bin/bash  
user2:x:1005:1005::/home/user2:/bin/bash  
user3:x:1006:1006::/home/user3:/bin/bash

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$

[student@localhost ~]$ man passwd

[student@localhost ~]$ man passwd; man 5 passwd

[student@localhost ~]$ man 5 passwd

[student@localhost ~]$

[student@localhost ~]$

[student@localhost home]$ touch view\_passwd\_man\_pages.sh  
touch: cannot touch 'view\_passwd\_man\_pages.sh': Permission denied

[student@localhost home]$ vi view\_passwd\_man\_pages.sh

[student@localhost home]$ man passwd; man passwd

[student@localhost home]$ man -k passwd  
passwd: nothing appropriate.

[student@localhost home]$

[student@192 ~]$ ls  
 Admin file Nti\_file quiz1.eval2 testfilerm  
 Desktop file\_diffination nti\_file2 quiz2.eval2 user\_list.txt  
 docs first.txt oldpasswd System Videos  
 Documents Links Pictures 'System Admin'  
 Downloads Music Public Templates

[student@192 ~]$ pwd

/home/student

[student@192 ~]$ man -k passwd  
passwd: nothing appropriate.

[student@192 ~]$ sudo mandb  
[sudo] password for student:

Processing manual pages under /usr/share/man/overrides...

Updating index cache for path `/usr/share/man/overrides/man3'. Wait...done.

Checking for stray cats under /usr/share/man/overrides...

Checking for stray cats under /var/cache/man/overrides...

Processing manual pages under /usr/share/man...

Updating index cache for path `/usr/share/man/man1'. Wait...

mandb: warning: /usr/share/man/man1/grub2-emu.1.gz: whatis parse for grub2-emu(1) failed

mandb: warning: /usr/share/man/man1/grub2-mount.1.gz: whatis parse for grub2-mount(1) failed

Updating index cache for path `/usr/share/man/man8'. Wait...mandb: can't open /usr/share/man/man8/nss-resolve.8: No such file or directory

mandb: warning: /usr/share/man/man8/libnss\_resolve.so.2.8.gz: bad symlink or ROFF `.so' request

Updating index cache for path `/usr/share/man/mann'. Wait...done.

Checking for stray cats under /usr/share/man...

Checking for stray cats under /var/cache/man...

Purging old database entries in /usr/share/man/overrides...

Processing manual pages under /usr/share/man/overrides...

Processing manual pages under /usr/share/man/hu...

Updating index cache for path `/usr/share/man/hu/man8'. Wait...done.

Checking for stray cats under /usr/share/man/hu...

Checking for stray cats under /var/cache/man/hu...

Processing manual pages under /usr/share/man/ru...

Updating index cache for path `/usr/share/man/ru/man7'. Wait...done.

Checking for stray cats under /usr/share/man/ru...

Checking for stray cats under /var/cache/man/ru...

Processing manual pages under /usr/share/man/cs...

Updating index cache for path `/usr/share/man/cs/man7'. Wait...done.

Checking for stray cats under /usr/share/man/cs...

Checking for stray cats under /var/cache/man/cs...

Processing manual pages under /usr/share/man/da...

Updating index cache for path `/usr/share/man/da/man8'. Wait...done.

Checking for stray cats under /usr/share/man/da...

Checking for stray cats under /var/cache/man/da...

Processing manual pages under /usr/share/man/de...

Updating index cache for path `/usr/share/man/de/man8'. Wait...done.

Checking for stray cats under /usr/share/man/de...

Checking for stray cats under /var/cache/man/de...

Processing manual pages under /usr/share/man/fr...

Updating index cache for path `/usr/share/man/fr/man7'. Wait...done.

Checking for stray cats under /usr/share/man/fr...

Checking for stray cats under /var/cache/man/fr...

Processing manual pages under /usr/share/man/id...

Updating index cache for path `/usr/share/man/id/man5'. Wait...done.

Checking for stray cats under /usr/share/man/id...

Checking for stray cats under /var/cache/man/id...

Processing manual pages under /usr/share/man/it...

Updating index cache for path `/usr/share/man/it/man8'. Wait...done.

Checking for stray cats under /usr/share/man/it...

Checking for stray cats under /var/cache/man/it...

Processing manual pages under /usr/share/man/ja...

Updating index cache for path `/usr/share/man/ja/man7'. Wait...done.

Checking for stray cats under /usr/share/man/ja...

Checking for stray cats under /var/cache/man/ja...

Processing manual pages under /usr/share/man/ko...

Updating index cache for path `/usr/share/man/ko/man8'. Wait...done.

Checking for stray cats under /usr/share/man/ko...

Checking for stray cats under /var/cache/man/ko...

Processing manual pages under /usr/share/man/pl...

Updating index cache for path `/usr/share/man/pl/man5'. Wait...done.

Checking for stray cats under /usr/share/man/pl...

Checking for stray cats under /var/cache/man/pl...

Processing manual pages under /usr/share/man/pt\_BR...

Updating index cache for path `/usr/share/man/pt\_BR/man8'. Wait...done.

Checking for stray cats under /usr/share/man/pt\_BR...

Checking for stray cats under /var/cache/man/pt\_BR...

Processing manual pages under /usr/share/man/sv...

Updating index cache for path `/usr/share/man/sv/man7'. Wait...done.

Checking for stray cats under /usr/share/man/sv...

Checking for stray cats under /var/cache/man/sv...

Processing manual pages under /usr/share/man/tr...

Updating index cache for path `/usr/share/man/tr/man1'. Wait...mandb: warning: /usr/share/man/tr/man1/evim.1.gz: whatis parse for evim(1) failed

mandb: warning: /usr/share/man/tr/man1/vim.1.gz: whatis parse for rview(1) failed

mandb: warning: /usr/share/man/tr/man1/vim.1.gz: whatis parse for view(1) failed

mandb: warning: /usr/share/man/tr/man1/vim.1.gz: whatis parse for vim(1) failed

mandb: warning: /usr/share/man/tr/man1/vim.1.gz: whatis parse for rvim(1) failed

mandb: warning: /usr/share/man/tr/man1/vim.1.gz: whatis parse for ex(1) failed

mandb: warning: /usr/share/man/tr/man1/vimdiff.1.gz: whatis parse for vimdiff(1) failed

mandb: warning: /usr/share/man/tr/man1/vimtutor.1.gz: whatis parse for vimtutor(1) failed

Updating index cache for path `/usr/share/man/tr/man7'. Wait...done.

Checking for stray cats under /usr/share/man/tr...

Checking for stray cats under /var/cache/man/tr...

Processing manual pages under /usr/share/man/zh\_CN...

Updating index cache for path `/usr/share/man/zh\_CN/man8'. Wait...done.

Checking for stray cats under /usr/share/man/zh\_CN...

Checking for stray cats under /var/cache/man/zh\_CN...

Processing manual pages under /usr/share/man/zh\_TW...

Updating index cache for path `/usr/share/man/zh\_TW/man8'. Wait...done.

Checking for stray cats under /usr/share/man/zh\_TW...

Checking for stray cats under /var/cache/man/zh\_TW...

Processing manual pages under /usr/share/man/uk...

Updating index cache for path `/usr/share/man/uk/man7'. Wait...done.

Checking for stray cats under /usr/share/man/uk...

Checking for stray cats under /var/cache/man/uk...

Processing manual pages under /usr/share/man/es...

Updating index cache for path `/usr/share/man/es/man1'. Wait...done.

Checking for stray cats under /usr/share/man/es...

Checking for stray cats under /var/cache/man/es...

Processing manual pages under /usr/share/man/sk...

Updating index cache for path `/usr/share/man/sk/man8'. Wait...done.

Checking for stray cats under /usr/share/man/sk...

Checking for stray cats under /var/cache/man/sk...

Processing manual pages under /usr/share/man/ca...

Updating index cache for path `/usr/share/man/ca/man5'. Wait...done.

Checking for stray cats under /usr/share/man/ca...

Checking for stray cats under /var/cache/man/ca...

Processing manual pages under /usr/share/man/nl...

Updating index cache for path `/usr/share/man/nl/man1'. Wait...done.

Checking for stray cats under /usr/share/man/nl...

Checking for stray cats under /var/cache/man/nl...

Processing manual pages under /usr/share/man/pt...

Updating index cache for path `/usr/share/man/pt/man5'. Wait...done.

Checking for stray cats under /usr/share/man/pt...

Checking for stray cats under /var/cache/man/pt...

Processing manual pages under /usr/share/man/sr...

Updating index cache for path `/usr/share/man/sr/man8'. Wait...done.

Checking for stray cats under /usr/share/man/sr...

Checking for stray cats under /var/cache/man/sr...

Processing manual pages under /usr/local/share/man...

Updating index cache for path `/usr/local/share/man/mann'. Wait...done.

Checking for stray cats under /usr/local/share/man...

Checking for stray cats under /var/cache/man/local...

119 man subdirectories contained newer manual pages.

7771 manual pages were added.

0 stray cats were added.

0 old database entries were purged.

[student@192 ~]$

[student@192 ~]$

[student@192 ~]$ man -k passwd  
chgpasswd (8) - update group passwords in batch mode  
chpasswd (8) - update passwords in batch mode  
fgetpwent\_r (3) - get passwd file entry reentrantly  
getpwent\_r (3) - get passwd file entry reentrantly  
gpasswd (1) - administer /etc/group and /etc/gshadow  
grub2-mkpasswd-pbkdf2 (1) - Generate a PBKDF2 password hash.  
lpasswd (1) - Change group or user password  
openssl-passwd (1ossl) - compute password hashes  
pam\_localuser (8) - require users to be listed in /etc/passwd  
passwd (1) - update user's authentication tokens  
passwd (1ossl) - OpenSSL application commands  
passwd (5) - password file  
passwd2des (3) - RFS password encryption  
pwhistory\_helper (8) - Helper binary that transfers password hashes from pass...  
smbpasswd (5) - The Samba encrypted password file

[student@192 ~]$

[student@192 ~]$

[student@192 ~]$

[student@192 ~]$ ^C

[student@192 ~]$ cat /etc/passwd  
root:x:0:0:root:/root:/bin/bash  
bin:x:1:1:bin:/bin:/sbin/nologin  
daemon:x:2:2:daemon:/sbin:/sbin/nologin  
adm:x:3:4:adm:/var/adm:/sbin/nologin  
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin  
sync:x:5:0:sync:/sbin:/bin/sync  
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown  
halt:x:7:0:halt:/sbin:/sbin/halt  
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin  
operator:x:11:0:operator:/root:/sbin/nologin  
games:x:12:100:games:/usr/games:/sbin/nologin  
ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin  
nobody:x:65534:65534:Kernel Overflow User:/:/sbin/nologin  
systemd-coredump:x:999:997:systemd Core Dumper:/:/sbin/nologin  
dbus:x:81:81:System message bus:/:/sbin/nologin  
polkitd:x:998:996:User for polkitd:/:/sbin/nologin  
tss:x:59:59:Account used for TPM access:/dev/null:/sbin/nologin  
avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin  
rpc:x:32:32:Rpcbind Daemon:/var/lib/rpcbind:/sbin/nologin  
colord:x:997:993:User for colord:/var/lib/colord:/sbin/nologin  
clevis:x:996:992:Clevis Decryption Framework unprivileged user:/var/cache/clevis:/usr/sbin/nologin  
rtkit:x:172:172:RealtimeKit:/proc:/sbin/nologin  
sssd:x:995:991:User for sssd:/:/sbin/nologin  
geoclue:x:994:990:User for geoclue:/var/lib/geoclue:/sbin/nologin  
libstoragemgmt:x:993:989:daemon account for libstoragemgmt:/var/run/lsm:/sbin/nologin  
setroubleshoot:x:992:988:SELinux troubleshoot server:/var/lib/setroubleshoot:/sbin/nologin  
pipewire:x:991:986:PipeWire System Daemon:/var/run/pipewire:/sbin/nologin  
flatpak:x:990:985:User for flatpak system helper:/:/sbin/nologin  
gdm:x:42:42::/var/lib/gdm:/sbin/nologin  
cockpit-ws:x:989:984:User for cockpit web service:/nonexisting:/sbin/nologin  
cockpit-wsinstance:x:988:983:User for cockpit-ws instances:/nonexisting:/sbin/nologin  
gnome-initial-setup:x:987:982::/run/gnome-initial-setup/:/sbin/nologin  
rpcuser:x:29:29:RPC Service User:/var/lib/nfs:/sbin/nologin  
sshd:x:74:74:Privilege-separated SSH:/usr/share/empty.sshd:/sbin/nologin  
chrony:x:986:981::/var/lib/chrony:/sbin/nologin  
dnsmasq:x:985:980:Dnsmasq DHCP and DNS server:/var/lib/dnsmasq:/sbin/nologin  
tcpdump:x:72:72::/:/sbin/nologin  
systemd-oom:x:978:978:systemd Userspace OOM Killer:/:/usr/sbin/nologin  
student:x:1000:1000:student:/home/student:/bin/bash  
akram:x:1001:10::/home/akram:/bin/bash  
AKRAM1:x:1002:1000::/home/AKRAM1:/bin/bash  
AKRAM:x:1003:1000::/home/AKRAM:/bin/bash  
user1:x:1004:1004::/home/user1:/bin/bash  
user2:x:1005:1005::/home/user2:/bin/bash  
user3:x:1006:1006::/home/user3:/bin/bash

[student@192 ~]$

[student@192 ~]$

[student@192 ~]$ man 5 passwd

[student@192 ~]$

[student@192 ~]$

[student@192 ~]$

[student@192 ~]$ vi mycv

[student@192 ~]$

[student@192 ~]$

[student@192 ~]$

[student@192 ~]$ cat mycv  
\*\*Curriculum Vitae (CV)\*\*  
  
\*\*Name:\*\* Akram Elgazzar  
\*\*Age:\*\* 25  
\*\*Email:\*\* akram.elgazar7@gmail.com  
\*\*Phone:\*\* +01225163833  
  
\*\*Education:\*\*  
- \*\*College:\*\* ACU University - B.Sc. Computer Science (2017-2021)  
  
\*\*Experience:\*\*  
- \*\*Data Engineer\*\* at Global Brands Group. (Mar.2025-present)  
- \*\*Big Data Engineer\*\* at NTI (Feb.2025-Present)  
  
\*\*Skills:\*\*  
- Linux, Python, SQL, SSIS, Pyspark, Hive, Powerbi  
  
\*\*Certifications:\*\*  
- Data Engineering  
- SQL Server  
- AWS Certified Cloud Practitioner

[student@192 ~]$

[student@192 ~]$

[student@192 ~]$

[student@192 ~]$ vi mycv

[student@192 ~]$

[student@192 ~]$ cat /etc/shells

/bin/sh

/bin/bash

/usr/bin/sh

/usr/bin/bash

[student@192 ~]$ echo $SHELL

/bin/bash

[student@192 ~]$

[student@192 ~]$

[student@192 ~]$

[student@192 ~]$