complete lab2

★13-Create a folder called myteam in your home directory and change its permissions to read only for the owner.

```
[hager@localhost ~]$ mkdir myteam
[hager@localhost ~]$ chmod 400 myteam/
[hager@localhost ~]$ ls -ld myteam/
dr-----. 2 hager hager 6 Jul 10 02:48 myteam/
```

★14-Log out and log in by another user

```
[hager@localhost ~]$ su - islam
Password:
Last login: Wed Jul 9 13:20:17 EET 2025 on pts/0
```

★15-Try to access (by cd command) the folder (myteam)

```
[islam@localhost ~]$ cd myteam/
-bash: cd: myteam/: No such file or directory
[islam@localhost ~]$ cd /home/hager/myteam
-bash: cd: /home/hager/myteam: Permission denied
```

16-# Using the Command Line

• Change the permissions of oldpasswd file to give owner read and write permissions and for group write and execute and execute only for the others (using chmod in 2 different ways)

```
[islam@localhost ~]$ su - hager
Password:
Last login: Wed Jul 9 13:11:52 EET 2025 on tty2
[hager@localhost ~]$ ls

Desktop docs Documents Downloads f Music myteam passwd
[hager@localhost ~]$ mv passwd oldpasswd
[hager@localhost ~]$ chmod u=rw,g=wx,o=x oldpasswd
[hager@localhost ~]$ ls -l oldpasswd
-rw--wx--x. 1 hager hager 2184 Jul 7 13:28 oldpasswd
[hager@localhost ~]$ chmod 631 oldpasswd
[hager@localhost ~]$ ls -l oldpasswd
-rw--wx--x. 1 hager hager 2184 Jul 7 13:28 oldpasswd
```

• Change your default permissions to be as above. (631-777=146) 📸

```
[hager@localhost ~]$ umask
0022
[hager@localhost ~]$ umask 146
[hager@localhost ~]$ umask
0146
```

 What is the maximum permission a file can have, by default when it is just created? And what is that for directory.

For Directories:

777 and after umask for dir 631

For Files:

666 and after umask (666-146=) for files 520 📸

```
[hager@localhost ~]$ mkdir hager1 ; ls -ld hager1
drw--wx--x. 2 hager hager 6 Jul 9 13:39 hager1
[hager@localhost ~]$ touch hager2 ; ls -l hager2
-rw--w---. 1 hager h<mark>a</mark>ger 0 Jul 9 13:41 hager2
```

• Change your default permissions to be no permission to everyone then create a directory and a file to verify.

```
[hager@localhost ~]$ umask 777
[hager@localhost ~]$ umask
0777
[hager@localhost ~]$ touch hager4 ; ls -l hager4
------ 1 hager hager 0 Jul 9 13:47 hager4
[hager@localhost ~]$ mkdir hager3 ; ls -ld hager3
mkdir: cannot create directory 'hager3': File exists
d------ 2 hager hager 6 Jul 9 13:46 hager3
```

17-#What are the minimum permission needed for:

Copy a directory (permission for source directory and permissions for target parent directory)

for source >>> rx

for target >>> wx

Copy a file (permission for source file and and permission fortarget parentdirectory)

for source >>> r

for target >>> wx

· Delete a file

WX

• Change to a directory

Х

• List a directory content (Is command)

rx

• View a file content (more/cat command)

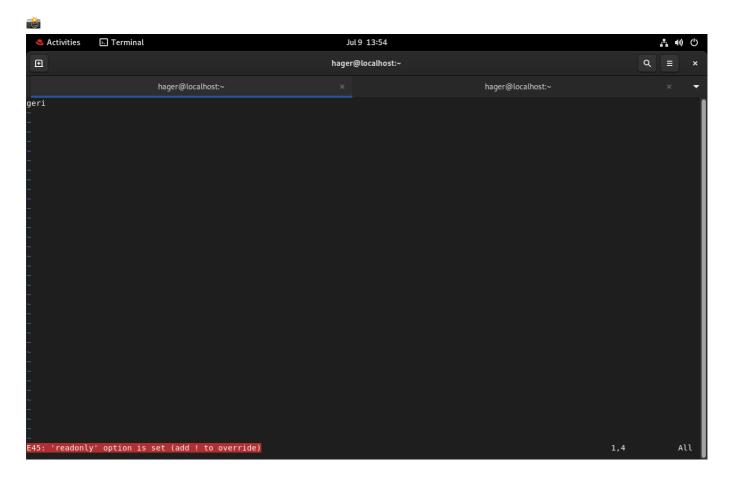
r

Modify a file content

W

★18-#Create a file with permission 444. Try to edit in it and to remove it? Note what happened.

```
[hager@localhost ~]$ chmod 444 hager5
[hager@localhost ~]$ ls -l hager5
-r--r--r-. 1 hager hager 0 Jul 9 13:53 hager5
[hager@localhost ~]$ vim hager" > hager5
-bash: hager5: Permission denied
[hager@localhost ~]$ rm hager5
rm: remove write-protected regular empty file 'hager5'? yes
[hager@localhost ~]$ ls -l hager5
ls: cannot access 'hager5': No such file or directory
```



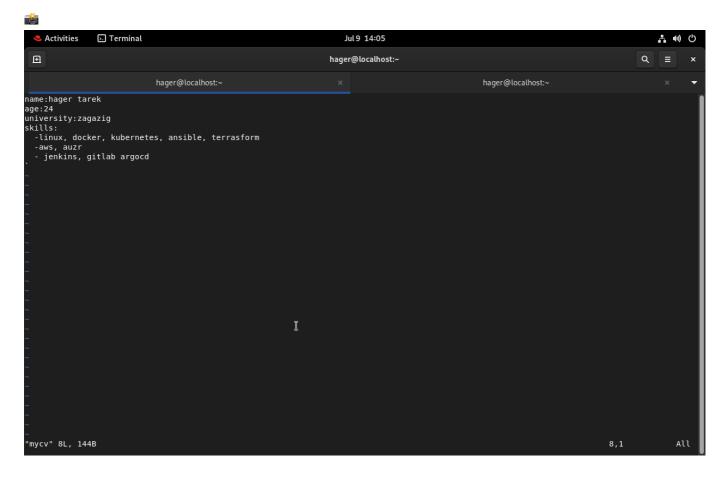
★19-#What is the difference between the "x" permission for a file and for a directory?

for file>>> run if it script

for dir>>> cd in this dir

lab2

★1-Using vi write your CV in the file mycv. Your CV should include your name, age, school, college, experience,...



★2-Open mycv file using vi command then: Without using arrows state how to:

• Move the cursor down one line at time.

j

• Move the cursor up one line at time.

k

• Search for word age

1

• Step to line 5 (assuming that you are in line 1 and file is more than 5 lines).

:set nu + enter

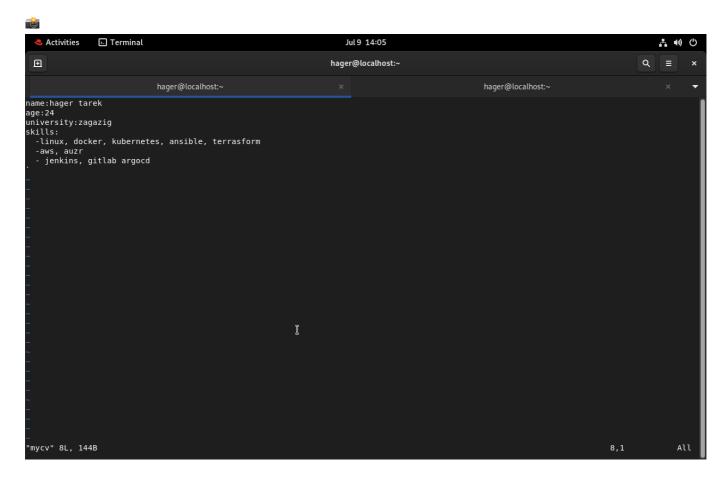
5G

• Delete the line you are on and line 5.

:.,5d

• How to step to the end of line and change to writing mode in one-step.

Α



★3-List the available shells in your system.

```
[hager@localhost ~]$ cat /etc/shells
/bin/sh
/bin/bash
/usr/bin/sh
/usr/bin/bash
```

⊀4-List the environment variables in your current shell.

```
[hager@localhost ~]$ env
SHELL=/bin/bash
HISTCONTROL=ignoredups
HISTSIZE=1000
HOSTNAME=localhost
PWD=/home/hager
.0GNAME=hager
XAUTHORITY=/home/hager/.xauthm4wPht
HOME=/home/hager
ANG=en US.UTF-8
.S COLORS=rs=0:di=01;34:ln=01;36:mh=00:pi=40;33:so=01;35:do
:tw=30;42:ow=34;42:st=37;44:ex=01;32:*.tar=01;31:*.tgz=01;
01;31:*.tlz=01;31:*.txz=01;31:*.tzo=01;31:*.t7z=01;31:*.zi
;31:*.zst=01;31:*.tzst=01;31:*.bz2=01;31:*.bz=01;31:*.tbz=0
`=01;31:*.sar=01;31:*.rar=01;31:*.alz=01;31:*.ace=01;31:*.
dwm=01;31:*.esd=01;31:*.jpg=01;35:*.jpeg=01;35:*.mjpg=01;
=01;35:*.xbm=01;35:*.xpm=01;35:*.tif=01;35:*.tiff=01;35:*.
:*.mpeq=01;35:*.m2v=01;35:*.mkv=01;35:*.Webm=01;35:*.webp=0
v=01;35:*.wmv=01;35:*.asf=01;35:*.rm=01;35:*.rmvb=01;35:*.
xwd=01;35:*.yuv=01;35:*.cgm=01;35:*.emf=01;35:*.ogv=01;35:
36:*.mka=01;36:*.mp3=01;36:*.mpc=01;36:*.ogg=01;36:*.ra=01
TERM=xterm-256color
LESSOPEN=||/usr/bin/lesspipe.sh %s
USER=hager
DISPLAY=:0
SHLVL=1
which declare=declare -f
XDG DATA DIRS=/home/hager/.local/share/flatpak/exports/sha
PATH=/home/hager/.local/bin:/home/hager/bin:/usr/local/bin
MAIL=/var/spool/mail/hager
BASH FUNC which%%=() {        ( alias;
eval ${which declare} ) | /usr/bin/which --ttv-only --rea
```

★5-List all of the environment variables for the bash shell.

or cat ~/.profile or cat ~/.bashrc

~/man bash

Shell Variables

The following variables are set by the shell:

At shell startup, set to the pathname used to invorted or argument list. Subsequently, expands to the lafter expansion. Also set to the full pathname ported to that command. When checking mail, this BASH Expands to the full filename used to invoke this BASHOPTS

A colon-separated list of enabled shell options.
builtin command (see **SHELL BUILTIN COMMANDS** below
If this variable is in the environment when **bash**any startum files. This variable is read and

★6-What are the commands that list the value of a specific variable?

~/echo \$HOME

★7-Display your current shell name.

~/echo \$BASH

★8-State the initialization files of: sh, ksh, bash.

This table summarizes the initialization files used by different shells during login and non-login sessions.

Shell	Login Shell Files	Non-login Shell Files
sh	/etc/profile, then ~/.profile	
ksh	/etc/profile, then ~/.profile	~/.kshrc
bash	<pre>/etc/profile, then the :</pre>	~/.bashrc

★9-Edit in your profile to display date at login and change your prompt permanently.

```
[hager@localhost ~]$ vim .bash profile
[hager@localhost ~]$ source .bash profile
Thu Jul 10 02:03:38 AM EET 2025
hager>>echo "hi"
hi
hager>>ls
total 8
drwxr-xr-x. 2 hager hager 6 May 3 12:50 Desktop
drwxrwxr-x. 2 hager hager
                             18 Jul
                                     7 13:14 docs
# .bash profile
date
PS1="hager>>"
# Get the aliases and functions
if [ -f ~/.bashrc ]; then
        . ~/.bashrc
fi
 User specific environment and startup programs
```

10- Execute the following command:

echo \ then press enter What is the purpose of $\ \$? Notice the prompt ">" what is that? and how can you change it from ">" to ":".

1-it to complete yor command but in new line

2-to change it search in man about the env variable for prompt by using ~/man bash or ~/compgen -v

```
PSO The value of this parameter is expanded (see PROMPTING below) and displayed by interactive shells after reading a command and before the command is executed.

PSI The value of this parameter is expanded (see PROMPTING below) and used as the primary prompt string. The default value is '`\s-\v\$''.

PS2 The value of this parameter is expanded as with PS1 and used as the secondary prompt string. The default is '`>''.

PS3 The value of this parameter is expanded as with PS1 and used as the secondary prompt string. The default is '`> ''.

PS4 The value of this parameter is expanded as with PS1 and the value is printed before each command bash displays during an execution trace. The first character of the expanded value of PS4 is replicated multiple times, as necessary, to indicate multiple levels of indirection. The default is '`+ ''.
```

```
[hager@localhost ~]$ PS2=":"
[hager@localhost ~]$ echo $PS2
:
[hager@localhost ~]$ echo \
:
```

★11-. Create a Bash shell alias named Is for the "Is -I" command.

```
[hager@localhost ~]$ alias ls='ls -l'
```