
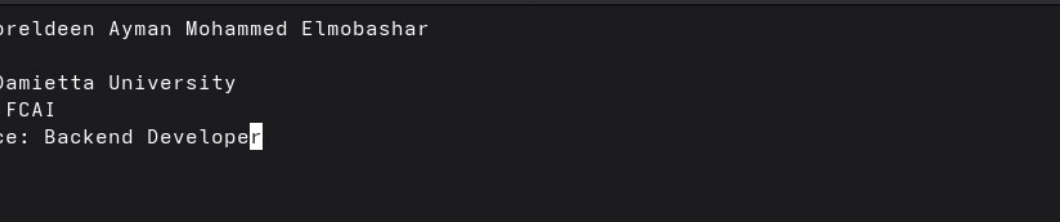


Branch: ITI Mansoura

A terminal window with a dark background. The title bar at the top shows the window title "noorelmobashar@fedora:~/docs" and the current directory "~/docs". The terminal content shows the user "noorelmobashar" at the "fedora" machine in the directory "~/docs" entering the command "vi mycv". The prompt changes to "\$" after the command is executed, indicating the user is now in the vi editor.

```
noorelmobashar@fedora:~/docs$ vi mycv
noorelmobashar@fedora:~/docs$
```



The screenshot shows a terminal window with a dark background. The title bar at the top displays the user 'noorelmobashar@fedora' and the current directory '~/docs'. The terminal content shows a user's profile information being displayed or entered:

```
Name: Nooreldeen Ayman Mohammed Elmobashar
Age: 22
School: Damietta University
College: FCAI
Experience: Backend Developer
```

Below the profile information, there are several tilde (~) characters, likely representing a list of files or directories. The bottom right corner of the terminal shows the page number '5,29' and the word 'All'.

2. Open mycv file using vi command then: Without using arrows state how to:
 - a. Move the cursor down one line at time.

Pressed j

[illegible]

- b. Move the cursor up one line at time.

Pressed k

A screenshot of a Linux terminal window. The title bar at the top shows three colored window control buttons (red, yellow, green) followed by a plus sign. The terminal title is "noorelmobashar@fedora:~/docs — /usr/libexec/vi mycv". Below the title bar, the current directory is indicated as "~/docs". The main area of the terminal displays the contents of the file "mycv":

```
Name: Nooreldeen Ayman Mohammed Elmobashar  
Age: 22  
School: Damietta University  
College: FCAI  
Experience: Backend Developer
```


Below the file content, there are several tilde (~) symbols representing blank lines. At the bottom left, it says "\"mycv\" 5L, 123B". At the bottom right, it shows "1,1" and "All".

c. Search for word age

Typed /Age

[illegible]

Pressed n

```
noorelmobashar@fedora:~/docs — /usr/libexec/vi mycv  
Name: Nooreldeen Ayman Mohammed Elmobashar  
Age: 22  
School: Damietta University  
College: FCAI  
Experience: Backend Developer  
~  
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search hit BOTTOM, continuing at TOP
```

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

Typed :5

[illegible]

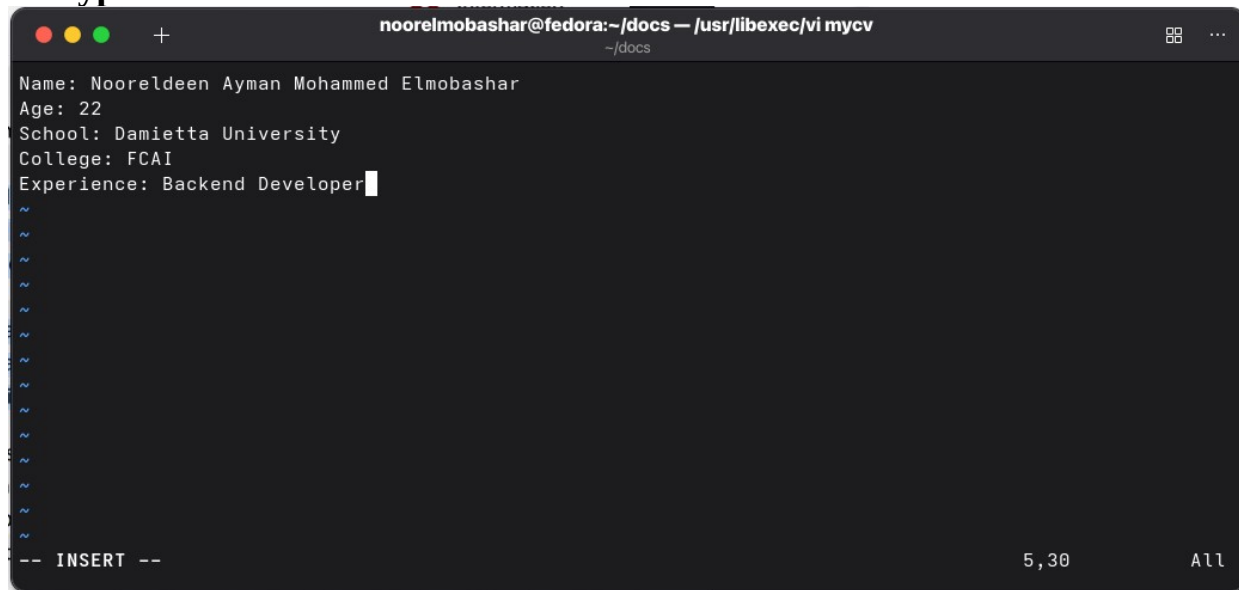
e. Delete the line you are on and line 5.

Typed dd

[illegible]

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

Typed A



The image shows a terminal window with a dark background. The title bar at the top reads "noorelmobashar@fedora:~/docs — /usr/libexec/vi mycv". Below the title bar, the text of a resume is displayed in a monospaced font. The resume includes personal information, education, and work experience. The text is as follows:

```
Name: Nooreldeen Ayman Mohammed Elmobashar
Age: 22
School: Damietta University
College: FCAI
Experience: Backend Developer
```

Below the resume text, there are several tilde characters (~) representing empty lines. At the bottom of the terminal, the status bar shows "-- INSERT --" on the left, "5,30" in the middle, and "All" on the right.

3. List the available shells in your system.

```
noorelmobashar@fedora:~/docs$ cat /etc/shells
/bin/sh
/bin/bash
/usr/bin/sh
/usr/bin/bash
/usr/bin/tmux
/bin/tmux
noorelmobashar@fedora:~/docs$
```

4. List the environment variables in your current shell.

```
noorelmobashar@fedora:~/docs$ env
SHELL=/bin/bash
COLORTERM=truecolor
HISTCONTROL=ignoredups
XDG_MENU_PREFIX=gnome-
QT_IM_MODULES=wayland;ibus
PTYIS_PROFILE=52bb30241efe2582941afacf6939f331
HOSTNAME=fedora
HISTSIZE=1000
SSH_AUTH_SOCK=/run/user/1000/gcr/ssh
MEMORY_PRESSURE_WRITE=c29tZSAyMDAwMDAgMjAwMDAwMAA=
XMODIFIERS=@im=ibus
DESKTOP_SESSION=gnome
GPG_TTY=/dev/pts/1
EDITOR=/usr/bin/nano
PWD=/home/noorelmobashar/docs
XDG_SESSION_DESKTOP=gnome
LOGNAME=noorelmobashar
XDG_SESSION_TYPE=wayland
SYSTEMD_EXEC_PID=16881
XAUTHORITY=/run/user/1000/.mutter-Xwaylandauth.HNY5H3
```

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

```
noorelmobashar@fedora:~/docs
noorelmobashar@fedora:~/docs$ export
declare -x COLORTERM="truecolor"
declare -x DBUS_SESSION_BUS_ADDRESS="unix:path=/run/user/1000/bus"
declare -x DEBUGINFOD_IMA_CERT_PATH="/etc/keys/ima:"
declare -x DEBUGINFOD_URLS="ima:enforcing https://debuginfod.fedoraproject.org/ ima:ignore "
declare -x DESKTOP_SESSION="gnome"
declare -x DISPLAY=":0"
declare -x EDITOR="/usr/bin/nano"
declare -x FLATPAK_TTY_PROGRESS="1"
declare -x GDMSESSION="gnome"
declare -x GDM_LANG="en_US.UTF-8"
declare -x GNOME_SETUP_DISPLAY=":1"
declare -x GPG_TTY="/dev/pts/1"
declare -x HISTCONTROL="ignoredups"
declare -x HISTSIZE="1000"
declare -x HOME="/home/noorelmobashar"
declare -x HOSTNAME="fedora"
declare -x INVOCATION_ID="0a202c2170f54ec19fd5aa36999d5eb4"
declare -x JOURNAL_STREAM="9:73773"
declare -x LANG="en_US.UTF-8"
declare -x LESSOPEN="||/usr/bin/lesspipe.sh %s"
```

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

Echo and printenv

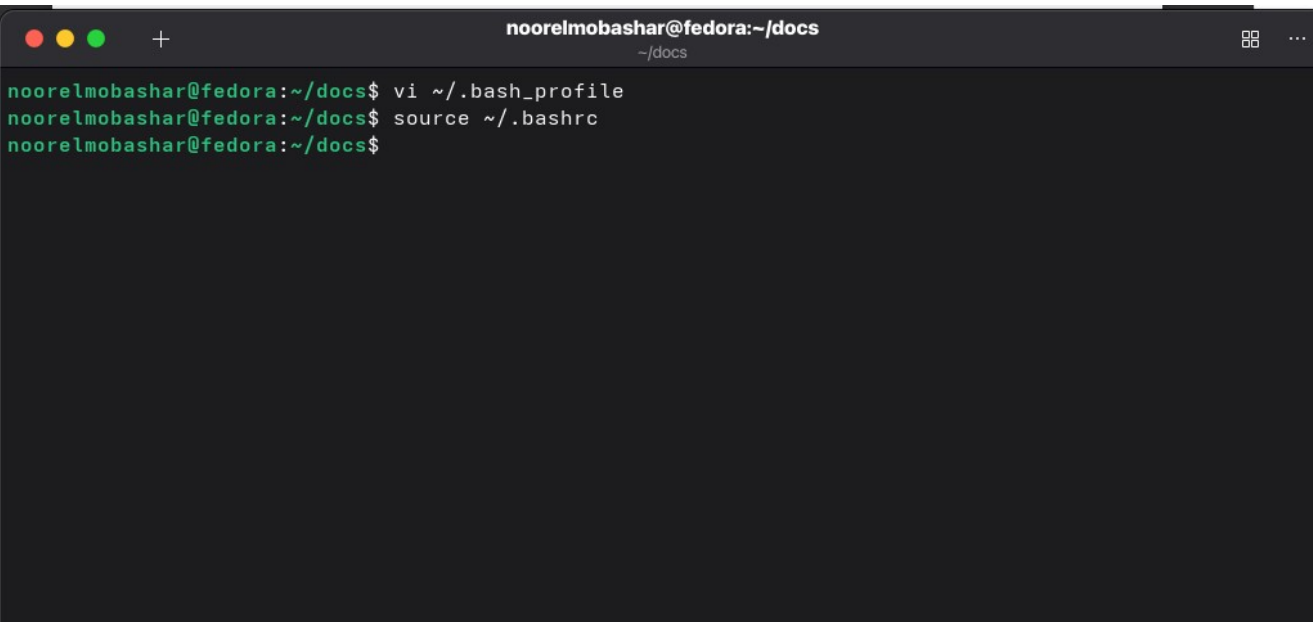
echo \$PATH → for example

7. Display your current shell name.

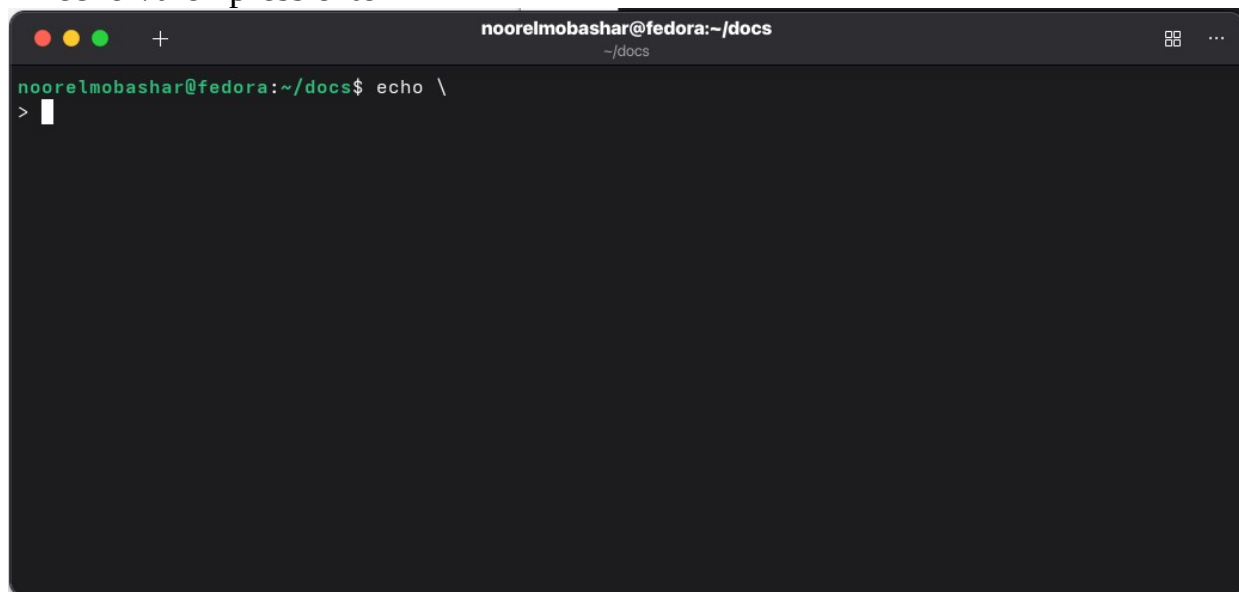
```
noorelmobashar@fedora:~/docs
noorelmobashar@fedora:~/docs$ echo $SHELL
/bin/bash
noorelmobashar@fedora:~/docs$
```

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

sh: /etc/profile, \$HOME/.profile

A terminal window with a dark background. The title bar at the top shows the window title "noorelmobashar@fedora:~/docs" and the current directory "~/docs". The terminal content shows three lines of text: "noorelmobashar@fedora:~/docs\$ vi ~/.bash_profile", "noorelmobashar@fedora:~/docs\$ source ~/.bashrc", and "noorelmobashar@fedora:~/docs\$". The prompt character is a green dollar sign. The window has standard macOS window controls (red, yellow, green buttons) and a plus sign for a new window. On the right side of the title bar, there are icons for window management (a grid) and a menu (three dots).

10. Execute the following command :
echo \ then press enter

A terminal window with a dark background. The title bar shows 'noorelmobashar@fedora:~/docs'. The prompt is 'noorelmobashar@fedora:~/docs\$'. The command 'echo \' has been entered. The prompt has changed to '>' on the next line, indicating a PS2 prompt. The cursor is at the end of the second line.

```
noorelmobashar@fedora:~/docs$ echo \  
>
```

What is the purpose of \ ?

It tells the shell that the command is not finished and continues on the next line

Notice the prompt ">" what is that? and how can you change it from ">"

**Its a PS2, it appears when the shell expects more input to complete the command.
We can use export PS2=":" (or any character you want).**

11. Create a Bash shell alias named ls for the "ls -l" command

```
noorelmobashar@fedora:~/docs
~/docs
noorelmobashar@fedora:~/docs$ alias ls='ls -l'
noorelmobashar@fedora:~/docs$ ls
total 4
-rw-r--r--. 1 noorelmobashar noorelmobashar 93 Dec 22 15:56 mycv
-rw-r--r--. 1 noorelmobashar noorelmobashar  0 Dec 20 14:02 mycv.txt
noorelmobashar@fedora:~/docs$
```