



Name: Kerolos Youssef Ghobrial

## LAB 4: Linux

Q1.

```
[kerolosyoussef@localhost ~]$ vi mycv
[kerolosyoussef@localhost ~]$ cat mycv
                                CV
                                Kerolos Youssef
Age : 23 years
School: Hosh Issa secondary school
college : Faculty of Engineering, Alexandria University
Experience : 3 months scholarship in ITI - Digital IC Design track
```

Q2.

- a) Type j in command mode
- b) Type k in command mode
- c) Type /Age in last line mode
- d) Type 5G in command mode
- e) To delete current line, type dd in command mode, to delete line 5 --> 5,5d in last line mode or :5d
- f) Type A in command mode

Q3.

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

Q4.

```
[kerołosyoussef@localhost ~]$ env
LS_COLORS=rs=0:di=38;5;33:ln=38;5;51:mh=00:pi=40;38;5;11:so=38;5;13:do=38;5;5:bd=48;5;232;38;5;11:cd=48;5;232;38;5;3:or=48;5;232;38;5;9:mi=01;05;37;41:su=48;5;196;38;5;15:sg=48;5;11;38;5;16:ca=48;5;196;38;5;226:tw=48;5;10;38;5;16:ow=48;5;10;38;5;21:st=48;5;21;38;5;15:ex=38;5;40:*.tar=38;5;9:*.tgz=38;5;9:*.arc=38;5;9:*.arj=38;5;9:*.taz=38;5;9:*.lha=38;5;9:*.lz4=38;5;9:*.lzh=38;5;9:*.lzma=38;5;9:*.t1z=38;5;9:*.txz=38;5;9:*.tzo=38;5;9:*.t7z=38;5;9:*.zip=38;5;9:*.z=38;5;9:*.dz=38;5;9:*.gz=38;5;9:*.lrz=38;5;9:*.lz=38;5;9:*.lzo=38;5;9:*.xz=38;5;9:*.zst=38;5;9:*.tztst=38;5;9:*.bz2=38;5;9:*.bz=38;5;9:*.tbz=38;5;9:*.tbz2=38;5;9:*.tz=38;5;9:*.deb=38;5;9:*.rpm=38;5;9:*.jar=38;5;9:*.war=38;5;9:*.ear=38;5;9:*.sar=38;5;9:*.rar=38;5;9:*.alz=38;5;9:*.ace=38;5;9:*.zoo=38;5;9:*.cpio=38;5;9:*.7z=38;5;9:*.rz=38;5;9:*.cab=38;5;9:*.wim=38;5;9:*.swm=38;5;9:*.dwm=38;5;9:*.esd=38;5;9:*.jpg=38;5;13:*.jpeg=38;5;13:*.mjpg=38;5;13:*.mjpeg=38;5;13:*.gif=38;5;13:*.bmp=38;5;13:*.pbm=38;5;13:*.pgm=38;5;13:*.ppm=38;5;13:*.tga=38;5;13:*.xbm=38;5;13:*.xpm=38;5;13:*.tif=38;5;13:*.tiff=38;5;13:*.png=38;5;13:*.svg=38;5;13:*.svgz=38;5;13:*.mng=38;5;13:*.pcx=38;5;13:*.mov=38;5;13:*.mpg=38;5;13:*.mpeg=38;5;13:*.m2v=38;5;13:*.mkv=38;5;13:*.webm=38;5;13:*.ogm=38;5;13:*.mp4=38;5;13:*.m4v=38;5;13:*.mp4v=38;5;13:*.vob=38;5;13:*.qt=38;5;13:*.nuv=38;5;13:*.wmv=38;5;13:*.asf=38;5;13:*.rm=38;5;13:*.rmvb=38;5;13:*.flc=38;5;13:*.avi=38;5;13:*.fli=38;5;13:*.flv=38;5;13:*.gl=38;5;13:*.dl=38;5;13:*.xcf=38;5;13:*.xwd=38;5;13:*.yuv=38;5;13:*.cgm=38;5;13:*.emf=38;5;13:*.ogv=38;5;13:*.ogx=38;5;13:*.aac=38;5;45:*.au=38;5;45:*.flac=38;5;45:*.m4a=38;5;45:*.mid=38;5;45:*.midi=38;5;45:*.mka=38;5;45:*.mp3=38;5;45:*.mpc=38;5;45:*.ogg=38;5;45:*.ra=38;5;45:*.wav=38;5;45:*.oga=38;5;45:*.opus=38;5;45:*.spx=38;5;45:*.xspf=38;5;45:
```

Q5.

```
[kerołosyoussef@localhost ~]$ man bash
```

```
Shell Variables
The following variables are set by the shell:

BASH      Expands to the full filename used to invoke this instance of
bash.

BASHOPTS  A colon-separated list of enabled shell options. Each word in
the list is a valid argument for the -s option to the shopt
builtin command (see SHELL BUILTIN COMMANDS below). The options
appearing in BASHOPTS are those reported as on by shopt. If
this variable is in the environment when bash starts up, each
shell option in the list will be enabled before reading any
startup files. This variable is read-only.

BASHPID   Expands to the process ID of the current bash process. This
differs from $$ under certain circumstances, such as subshells
that do not require bash to be re-initialized.

BASH_ALIASES
An associative array variable whose members correspond to the
internal list of aliases as maintained by the alias builtin.
Elements added to this array appear in the alias list; however,
unsetting array elements currently does not cause aliases to be
Manual page bash(1) line 775/5947 13% (press h for help or q to quit)
```

Q6.

```
[kerołosyoussef@localhost ~]$ echo $HOME
/home/kerołosyoussef
[kerołosyoussef@localhost ~]$ printenv HOME
/home/kerołosyoussef
```

Q7.

```
[kerołosyoussef@localhost ~]$ printenv SHELL
/bin/bash
```

Q8.

Initialization files in bash : .bashrc, .profile, .bash\_profile

Initialization files in sh : .profile

Initialization files in ksh : .profile, .kshrc

Q9.

```
# .bashrc

# Source global definitions
if [ -f /etc/bashrc ]; then
    . /etc/bashrc
fi

# User specific environment
if ! [[ "$PATH" =~ "$HOME/.local/bin:$HOME/bin:" ]]
then
    PATH="$HOME/.local/bin:$HOME/bin:$PATH"
fi
export PATH

# Uncomment the following line if you don't like systemctl's auto-paging feature
:
# export SYSTEMD_PAGER=

# User specific aliases and functions
date
PS1="kero>"

~
```

```
[kerołosyoussef@localhost ~]$ bash
Wed Aug 30 16:04:50 EET 2023
kero>
```

## Q11.

```
[kerolosyoussef@localhost ~]$ alias ls="ls -l"
[kerolosyoussef@localhost ~]$ ls
total 8
drwxr-xr-x. 2 kerolosyoussef kerolosyoussef   6 Aug 27 16:00 Desktop
drwxrwxr-x. 2 kerolosyoussef kerolosyoussef  18 Aug 27 16:26 docs
drwxr-xr-x. 2 kerolosyoussef kerolosyoussef   6 Aug 27 16:00 Documents
drwxr-xr-x. 2 kerolosyoussef kerolosyoussef   6 Aug 27 16:00 Downloads
-r--r--r--. 1 kerolosyoussef kerolosyoussef   0 Aug 29 17:20 file1
d-w--wx--x. 3 kerolosyoussef kerolosyoussef  20 Aug 29 16:24 kero
drwx-----. 3 kerolosyoussef kerolosyoussef  19 Aug 29 16:33 kero2
drwx-----. 2 kerolosyoussef kerolosyoussef  19 Aug 29 16:46 kero3
d-wx-----. 3 kerolosyoussef kerolosyoussef  19 Aug 29 16:42 kero4
d-wx---r-x. 2 kerolosyoussef kerolosyoussef  19 Aug 29 16:50 kero5
dr-x-----. 2 kerolosyoussef kerolosyoussef   6 Aug 29 17:01 kero6
drwxr-xr-x. 2 kerolosyoussef kerolosyoussef   6 Aug 27 16:00 Music
-rw-rw-r--. 1 kerolosyoussef kerolosyoussef 261 Aug 30 15:13 mycv
dr-xr-xr-x. 2 kerolosyoussef kerolosyoussef   6 Aug 29 15:17 myteam
-rw--wx--x. 1 kerolosyoussef kerolosyoussef 2538 Aug 27 16:54 oldpasswd
drwxr-xr-x. 2 kerolosyoussef kerolosyoussef   6 Aug 27 16:00 Pictures
drwxr-xr-x. 2 kerolosyoussef kerolosyoussef   6 Aug 27 16:00 Public
drwxr-xr-x. 2 kerolosyoussef kerolosyoussef   6 Aug 27 16:00 Templates
drwxr-xr-x. 2 kerolosyoussef kerolosyoussef   6 Aug 27 16:00 Videos
```