

# Rahma Farag – G2 – Nasr city

## Lab 3

Q1: cat /etc/shells

```
rahma@rahma-Lenovo:~$ cat /etc/shells
# /etc/shells: valid login shells
/bin/sh
/bin/bash
/usr/bin/bash
/bin/rbash
/usr/bin/rbash
/bin/dash
/usr/bin/dash
rahma@rahma-Lenovo:~$
```

Q2: env

```
rahma@rahma-Lenovo:~$ env
SHELL=/bin/bash
SESSION_MANAGER=local/rahma-Lenovo:@/tmp/.ICE-unix/1391,unix/rahma-Lenovo:/tmp/.ICE-unix/1391
QT_ACCESSIBILITY=1
COLORTERM=truecolor
XDG_CONFIG_DIRS=/etc/xdg/xdg-ubuntu:/etc/xdg
XDG_MENU_PREFIX=gnome-
GNOME_DESKTOP_SESSION_ID=this-is-deprecated
LC_ADDRESS=en_GB.UTF-8
GNOME_SHELL_SESSION_MODE=ubuntu
LC_NAME=en_GB.UTF-8
SSH_AUTH_SOCK=/run/user/1000/keyring/ssh
XMODIFIERS=@im=ibus
DESKTOP_SESSION=ubuntu
LC_MONETARY=en_GB.UTF-8
SSH_AGENT_PID=1357
GTK_MODULES=gail:atk-bridge
```

Q3:

```
rahma@rahma-Lenovo:~$ echo $SHELL
```

```
/bin/bash
```

```
rahma@rahma-Lenovo:~$ man bash
```

Q4:

```
printenv env_variable
```

```
rahma@rahma-Lenovo:~$ printenv HOME
```

```
/home/rahma
```

Q5:

```
rahma@rahma-Lenovo:~$ echo $SHELL
```

```
/bin/bash
```

Q6:

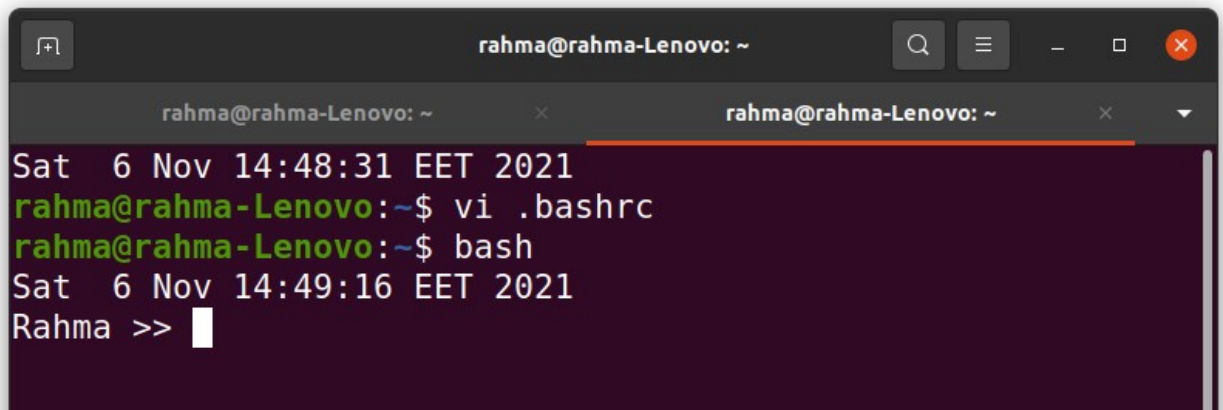
sh	ksh	csh	bash
.profile	.profile	.login	.profile

Q7:

**rahma@rahma-Lenovo:~\$** vi .bashrc

just add the command date at the end of the file .bashrc

and to change the prompt we write PS1=" Rahma >> " then save by :wq

A terminal window titled 'rahma@rahma-Lenovo: ~' with search, menu, and window control icons. It shows the following sequence of commands and output:

```
Sat 6 Nov 14:48:31 EET 2021
rahma@rahma-Lenovo:~$ vi .bashrc
rahma@rahma-Lenovo:~$ bash
Sat 6 Nov 14:49:16 EET 2021
Rahma >> 
```

Q8:

**rahma@rahma-Lenovo:~\$** echo \

> hello

hello

**rahma@rahma-Lenovo:~\$** echo \

> test

test

“\  
” allows us to continue the command on the next line and the shell ignores the \  
and treats the whole text as a single command

```
rahma@rahma-Lenovo:~$PS2=":"
```

```
rahma@rahma-Lenovo:~$ echo \
```

```
:hello
```

```
hello
```

Q9:

```
rahma@rahma-Lenovo:~$ alias lsd="ls -ld"
```

```
rahma@rahma-Lenovo:~$ lsd
```

```
drwxr-xr-x 25 rahma rahma 4096 Nov  6 14:00 .
```

## Lab 4

Q1:

```
rahma@rahma-Lenovo:~$ ls /usr/bin >/tmp/commands.list
```

Q2:

```
rahma@rahma-Lenovo:~$ ls /usr/bin | tee /tmp/commands.list |
```

```
wc -l
```

```
1416
```

Q3:

```
rahma@rahma-Lenovo:~$ grep ^g /etc/passwd
games:x:5:60:games:/usr/games:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System
(admin):/var/lib/gnats:/usr/sbin/nologin
geoclue:x:122:127::/var/lib/geoclue:/usr/sbin/nologin
gnome-initial-setup:x:124:65534::/run/gnome-initial-setup:/bin/
false
gdm:x:125:130:Gnome Display Manager:/var/lib/gdm3:/bin/false
```

Q4:

```
rahma@rahma-Lenovo:~$ cat /etc/passwd | cut -f1,5 -d: | grep
^gu
```

don't need cat

Q5:

```
rahma@rahma-Lenovo:~$ cat /etc/passwd | cut -f1,5 -d: | grep
^g | sort -t: -k2 > usernamessorted
```

```
rahma@rahma-Lenovo:~$ cat usernamessorted
```

geoclue:

gnome-initial-setup:

games:games

gnats:Gnats Bug-Reporting System (admin)

gdm:Gnome Display Manager

don't need cat

Q6:

**part1:**

```
rahma@rahma-Lenovo:~$ ls -R / 2> errfile | grep .bash_profile
```

dot.bash\_profile

```
find / -name .bash_profile 2> /dev/null
```

**part2:**

```
rahma@rahma-Lenovo:~$ ls -R / 2> errfile | grep bash.profile |
```

```
sort -t: >datafile
```

```
ls -R / 2>errfile | sort >file &
```

Q7:

```
rahma@rahma-Lenovo:~$ echo $USER | wc -l
```

1

or

```
rahma@rahma-Lenovo:~$ w
```

15:38:23 up 7:11, 1 user, load average: 1.13, 0.93, 0.70

USER	TTY	FROM	LOGIN@	IDLE	JCPU	PCPU	WHAT
------	-----	------	--------	------	------	------	------

rahma	:0	:0	08:27 ?xdm?	3:52m	0.02s	/usr/li	
-------	----	----	-------------	-------	-------	---------	--

Q8:

**rahma@rahma-Lenovo:~\$** head /etc/passwd | tail -4

man:x:6:12:man:/var/cache/man:/usr/sbin/nologin

lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin

mail:x:8:8:mail:/var/mail:/usr/sbin/nologin

news:x:9:9:news:/var/spool/news:/usr/sbin/nologin

**rahma@rahma-Lenovo:~\$** tail +7 /etc/passwd | head -4

man:x:6:12:man:/var/cache/man:/usr/sbin/nologin

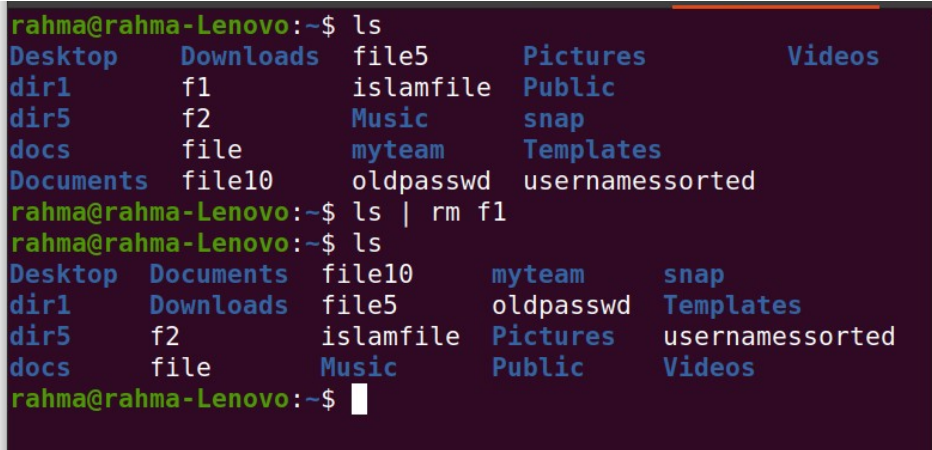
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin

mail:x:8:8:mail:/var/mail:/usr/sbin/nologin

news:x:9:9:news:/var/spool/news:/usr/sbin/nologin

Q9:

cat filename1   cat filename2	<b>rahma@rahma-Lenovo:~\$</b> echo "this is file 1" > f1 <b>rahma@rahma-Lenovo:~\$</b> cat f1 this is file 1 <b>rahma@rahma-Lenovo:~\$</b> echo "this is file 2" > f2 <b>rahma@rahma-Lenovo:~\$</b> cat f2 this is file 2 <b>rahma@rahma-Lenovo:~\$</b> cat f1   f2 f2: command not found <b>rahma@rahma-Lenovo:~\$</b> cat f1   cat f2
-------------------------------------	---

	<p>this is file 2</p> <p>Only prints the second file</p>
ls   rm	 <p>removes the file specified</p>
ls /etc/passwd   wc -l	<p><b>rahma@rahma-Lenovo:~\$</b> ls /etc/passwd   wc -l</p> <p>1</p> <p>prints number of lines which is 1</p>

Q10:

**rahma@rahma-Lenovo:~\$** sleep 100

Q11:

Ctrl + Z

**rahma@rahma-Lenovo:~\$** sleep 100

^Z

[1]+ Stopped sleep 100



Q12:

**rahma@rahma-Lenovo:~\$** jobs

[1]+ Stopped sleep 100

**rahma@rahma-Lenovo:~\$** kill -SIGCONT %1

**rahma@rahma-Lenovo:~\$** jobs

[1]+ Running sleep 100 &

or

**rahma@rahma-Lenovo:~\$** sleep 100

^Z

[1]+ Stopped sleep 100

**rahma@rahma-Lenovo:~\$** bg %1

[1]+ sleep 100 &

**rahma@rahma-Lenovo:~\$** jobs

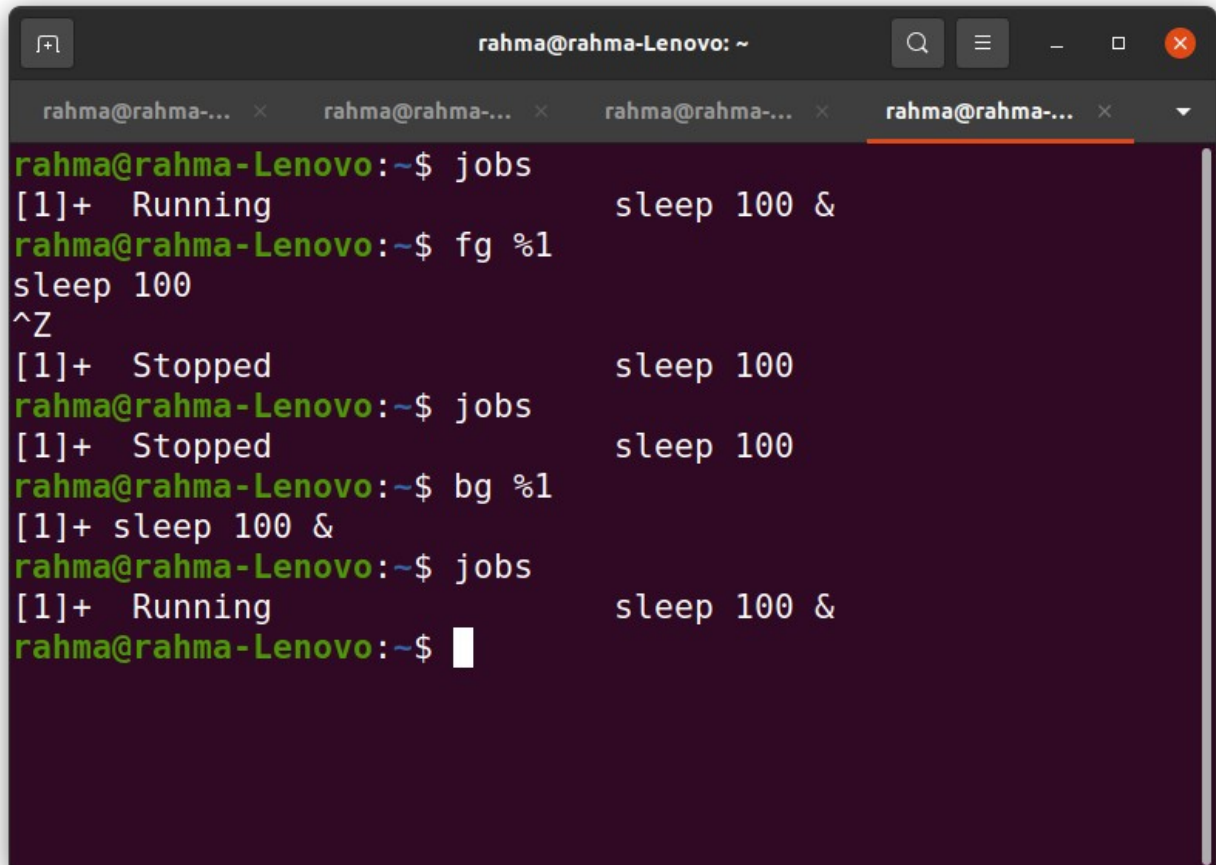
[1]+ Running sleep 100 &

Q13:

**rahma@rahma-Lenovo:~\$** jobs

[1]+ Running sleep 100 &

Q14:



```
rahma@rahma-Lenovo: ~  
rahma@rahma-... x  rahma@rahma-... x  rahma@rahma-... x  rahma@rahma-... x  
rahma@rahma-Lenovo:~$ jobs  
[1]+  Running                  sleep 100 &  
rahma@rahma-Lenovo:~$ fg %1  
sleep 100  
^Z  
[1]+  Stopped                  sleep 100  
rahma@rahma-Lenovo:~$ jobs  
[1]+  Stopped                  sleep 100  
rahma@rahma-Lenovo:~$ bg %1  
[1]+ sleep 100 &  
rahma@rahma-Lenovo:~$ jobs  
[1]+  Running                  sleep 100 &  
rahma@rahma-Lenovo:~$
```

Q15:

```
rahma@rahma-Lenovo:~$ jobs  
[1]+  Running                  sleep 100 &  
rahma@rahma-Lenovo:~$ kill -9 %1  
rahma@rahma-Lenovo:~$ jobs  
[1]+  Killed                   sleep 100
```

Q16:

**rahma@rahma-Lenovo:~\$** ps aux | grep ^rahma

or

**rahma@rahma-Lenovo:~\$** ps aux | grep -u rahma

Q17:

**rahma@rahma-Lenovo:~\$** ps aux | grep -v rahma

Q18:

**rahma@rahma-Lenovo:~\$** pgrep -l -u rahma

Q19:

**rahma@rahma-Lenovo:~\$** sudo killall -u rahma

# Bouns

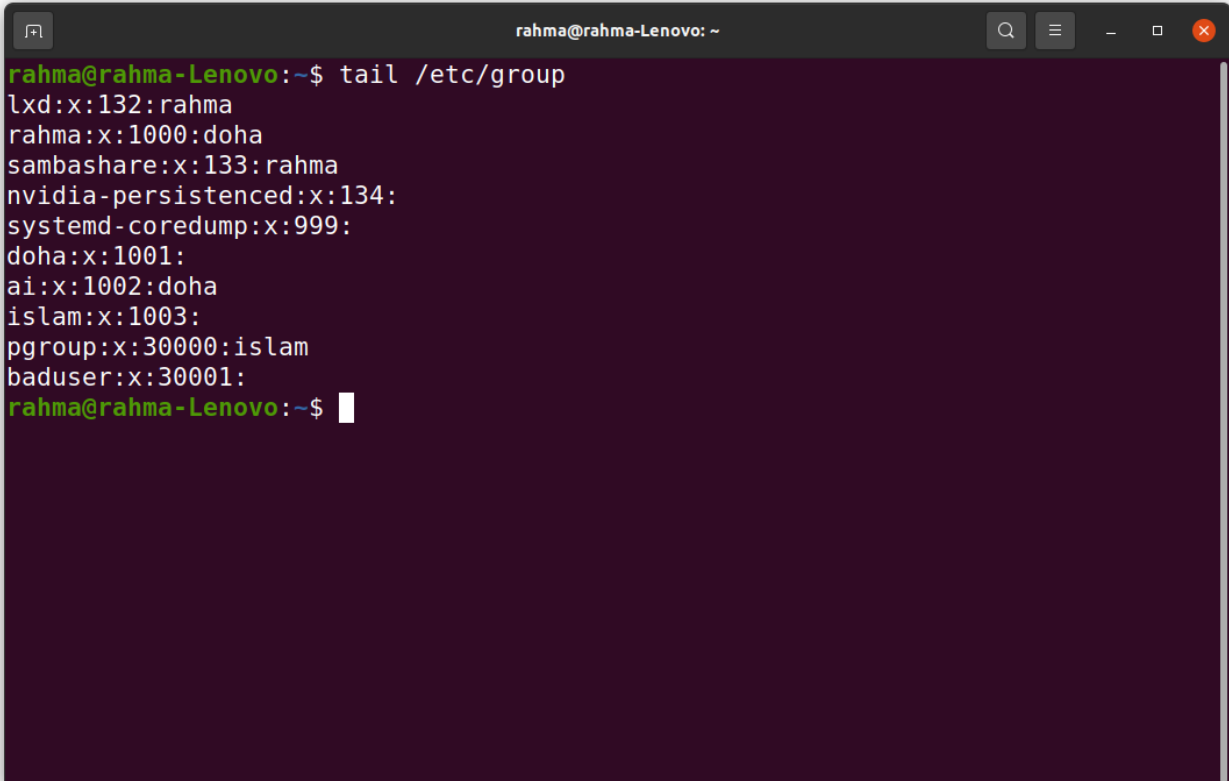
1- The ?? after warn in */etc/shadow*

password is expired but account is not yet

the password is accepted then user prompted to change it

2-

the comma separated group members list secondary group members only not all members



```
rahma@rahma-Lenovo: ~  
rahma@rahma-Lenovo:~$ tail /etc/group  
lxd:x:132:rahma  
rahma:x:1000:doha  
sambashare:x:133:rahma  
nvidia-persistenced:x:134:  
systemd-coredump:x:999:  
doha:x:1001:  
ai:x:1002:doha  
islam:x:1003:  
pgroup:x:30000:islam  
baduser:x:30001:  
rahma@rahma-Lenovo:~$
```