

### Lap3

3. List the available shells in your system

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

4. List the environment variables in your current shell.

Using env , printenv or set

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

Using env, printenv

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

Echo

7. Display your current shell name.

```
[ghada@localhost ~]$ echo $SHELL
/bin/bash
```

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

Using cat /etc/profile

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

```
# .bash_profile

# Get the aliases and functions
if [ -f ~/.bashrc ]; then
    . ~/.bashrc
fi

# User specific environment and startup programs
echo $(date)
echo "Hello changing bash.profile user specific environment"

~
```

```
exit
[root@localhost ~]# su ghada
[ghada@localhost root]$ exit
exit
[root@localhost ~]# su - ghada
Sun Dec 29 03:50:23 PM EET 2024
Hello changing bash.profile user specific environment
```

10. Execute the following command :

echo \ then press enter

```

One
[ghada@localhost ~]$ echo \
> ghada
ghada

```

What is the purpose of \ ? **wait to enter something and print it**

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

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

```

[ghada@localhost ~]$ alias ls="ls -l"
[ghada@localhost ~]$ ls
total 8
-rw-r--r--. 1 ghada ghada 245 Dec 25 15:16 cv
drwxr-xr-x. 2 ghada ghada  6 Dec 23 15:32 Desktop
drwxr-xr-x. 2 ghada ghada 18 Dec 23 17:04 docs
drwxr-xr-x. 2 ghada ghada  6 Dec 23 15:32 Documents
drwxr-xr-x. 2 ghada ghada  6 Dec 23 15:32 Downloads
drwxr-xr-x. 2 ghada ghada  6 Dec 23 15:32 Music
dr--r-xr-x. 2 ghada ghada  6 Dec 25 12:46 myteam
d------. 2 ghada ghada  6 Dec 25 13:58 noPermission
-rw--wx--x. 1 ghada ghada 1959 Dec 23 17:38 oldpasswd
drwxr-xr-x. 2 ghada ghada  6 Dec 23 15:32 Pictures
drwxr-xr-x. 2 ghada ghada  6 Dec 23 15:32 Public
drwxr-xr-x. 2 ghada ghada  6 Dec 23 15:32 Templates
drwxr-xr-x. 2 ghada ghada  6 Dec 23 15:32 Videos

```

Lap 4:

10. Issue the command sleep 100.

```

[ghada@localhost ~]$ sleep 1000
^C
[ghada@localhost ~]$ █

```

11. stop the last command

Pressing ctrl+c

12. resume the last command in the background

13. Issue the jobs command and see its output. **Will show processes in the background**

```

[ghada@localhost ~]$ ps
  PID TTY          TIME CMD
  3168 pts/0    00:00:05 bash
  3660 pts/0    00:00:00 ps
[ghada@localhost ~]$ sleep 1000 &
[1] 3678
[ghada@localhost ~]$ jobs
[1]+  Running                  sleep 1000 &

```

14. Send the sleep command to the foreground and send it again to the background.

```
[ghada@localhost ~]$ ps
  PID TTY          TIME CMD
  3168 pts/0    00:00:05 bash
  3660 pts/0    00:00:00 ps
[ghada@localhost ~]$ sleep 1000 &
[1] 3678
[ghada@localhost ~]$ jobs
[1]+  Running                  sleep 1000 &
```

15. Kill the sleep command

```
[ghada@localhost ~]$ kill -KILL 3678
[1]+  Killed                  sleep 1000
```

16. Display your processes only

```
[ghada@localhost ~]$ ps
  PID TTY          TIME CMD
  3168 pts/0    00:00:05 bash
  3820 pts/0    00:00:00 ps
```

17. Display all processes except yours

```
[ghada@localhost ~]$ ps -u ghada
  PID TTY          TIME CMD
  2276 ?            00:00:02 systemd
  2278 ?            00:00:00 (sd-pam)
  2294 ?            00:00:00 gnome-keyring-d
  2306 tty2        00:00:00 gdm-wayland-ses
  2308 ?            00:00:00 dbus-broker-lau
  2309 ?            00:00:00 dbus-broker
  2311 tty2        00:00:00 gnome-session-b
  2340 ?            00:00:00 gnome-session-c
  2342 ?            00:00:00 gnome-session-b
  2361 ?            00:00:07 gnome-shell
  2369 ?            00:00:00 gvfsd
  2374 ?            00:00:00 gvfsd-fuse
  2377 ?            00:00:00 at-spi-bus-laun
  2386 ?            00:00:00 dbus-broker-lau
```

18. Use the pgrep command to list your processes only

```
[ghada@localhost ~]$ pgrep -u ghada -l
2277 systemd
2279 (sd-pam)
2295 gnome-keyring-d
2307 gdm-wayland-ses
2309 dbus-broker-lau
2310 dbus-broker
2312 gnome-session-b
2341 gnome-session-c
2342 gnome-session-b
2359 gnome-shell
2367 gvfsd
2372 gvfsd-fuse
2381 at-spi-bus-laun
2386 dbus-broker-lau
2387 dbus-broker
2400 xdg-permission-
2403 gnome-shell-cal
2411 pipewire
2414 wireplumber
2415 pipewire-pulse
2448 evolution-sourc
```

19. kill your processes only

Pkill -u ghada

20. make top run for 2 minutes and refresh every 30 seconds and sort by memory

```
2917 ghada 20 0 591572 27768 19844 S 0.0 1.6 0:00.16 xdg-desktop-por
[ghada@localhost ~]$ top -d 30 -o %MEM -n 4
```

```
top - 15:30:30 up 6 min, 2 users, load average: 0.17, 0.48, 0.27
Tasks: 321 total, 1 running, 320 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 4.9 sy, 0.0 ni, 93.5 id, 0.0 wa, 1.6 hi, 0.0 si, 0.0 st
MiB Mem : 1741.9 total, 89.1 free, 1341.0 used, 482.5 buff/cache
MiB Swap: 2064.0 total, 2061.7 free, 2.2 used. 400.9 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1921	root	20	0	732580	207180	22836	S	0.0	11.6	0:21.49	packagekitd
2338	ghada	20	0	4155708	194780	106036	S	0.0	10.9	0:12.12	gnome-shell
2529	ghada	20	0	1028940	88036	44596	S	0.0	4.9	0:04.05	gnome-software
2852	ghada	20	0	200076	67828	48852	S	0.0	3.8	0:00.46	Xwayland
2763	root	20	0	458488	66832	28672	S	0.0	3.7	0:01.61	rhsm-service
2859	ghada	20	0	823544	60624	48896	S	0.0	3.4	0:00.21	gsd-xsettings
2865	ghada	20	0	675868	58368	49024	S	0.0	3.3	0:00.19	ibus-x11
2957	ghada	20	0	763548	50012	37372	S	0.0	2.8	0:03.73	gnome-terminal-
965	root	20	0	251812	44500	10180	S	0.0	2.5	0:00.77	firewalld