

Niveau Débutant

- 1. Quelle commande affiche les fichiers et dossiers du répertoire courant ?**
 - ▶ a) ls
 - ▶ b) pwd
 - ▶ c) cd
 - ▶ d) cp

Réponse:

► a) ls



Lists the content of a folder

```
list all files of      view as list
current directory | all files, incl. hidden
                   ||

dev@dev-machine:~$ ls -lah --human readable file size
total 15,2M --size of entire directory
directory drwx-----@ 51 dev  devs  1632B 22 Sep 16:11 Desktop
           drwx-----@  7 dev  devs   224B  8 Apr 16:02 Documents
           drwx-----@ 56 dev  devs  1792B 25 Sep 17:14 Downloads
file    -rw-r--r--@   1 dev  devs   980K 19 Sep 16:33 package.json
link    lrwxrwxrwx@ 10 dev  devs   696G 20 Sep 16:33 memories.avi
          Owner   Others   Number   Size   Day- Month- Time-   Filename
          Group   Group   of links   Byte   Day- Month- Time-
          Permissions   User   Group   K=Kilobyte   Last modified
          r=read   w=write   x=execute   M=Megabyte   G=Gigabyte   T=Terabyte
```

<https://www.gnu.org/software/coreutils/ls>

2. Quelle commande permet de créer un nouveau fichier vide ?

- ▶ a) mkdir
- ▶ b) touch
- ▶ c) nano
- ▶ d) cp

Réponse:

- ▶ b) touch

```
student@SAR134:~/GeeksForGeeks$ touch Geek.txt
student@SAR134:~/GeeksForGeeks$ ls -l
total 0
-rw-rw-r-- 1 student student 0 Apr 17 18:08 Geek.txt
student@SAR134:~/GeeksForGeeks$ touch -d "17 Mar 2023" Geek.txt
student@SAR134:~/GeeksForGeeks$ ls -l
total 0
-rw-rw-r-- 1 student student 0 Mar 17 00:00 Geek.txt
student@SAR134:~/GeeksForGeeks$ █
```

3. Comment afficher le chemin complet du répertoire actuel ?

- ▶ a) ls -l
- ▶ b) cd /
- ▶ c) pwd
- ▶ d) echo \$PATH

Réponse:

► c) pwd

```
PWD(1)                               User Commands
NAME
    pwd - print name of current/working directory
SYNOPSIS
    pwd [OPTION]...
DESCRIPTION
    Print the full filename of the current working directory.
    -L, --logical
        use PWD from environment, even if it contains symlinks
    -P, --physical
        avoid all symlinks
    --help
        display this help and exit
    --version
        output version information and exit
If no option is specified, -P is assumed.
NOTE: your shell may have its own version of this command; usually, the command in the user's shell overrides the version in /bin or /usr/bin. See the documentation for the user's shell for details about options it supports.
```

A white and black penguin with yellow feet and a yellow beak, standing in front of a dark background. It is positioned to the right of the terminal window containing the 'pwd' command help text.

4. Quelle commande est utilisée pour copier un fichier ?

- ▶ a) mv
- ▶ b) cp
- ▶ c) copy
- ▶ d) scp

Réponse:

- ▶ b) cp

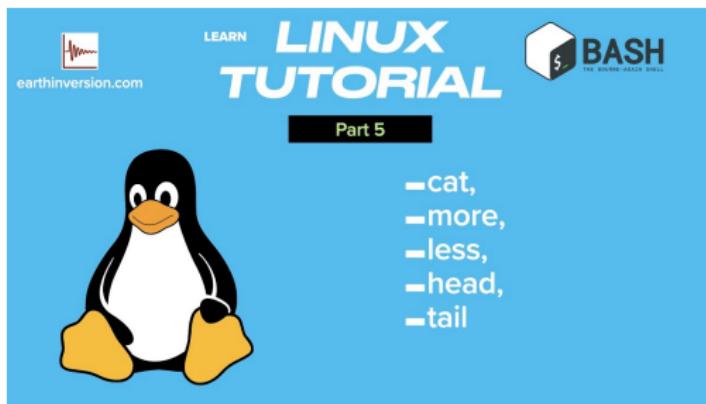
```
Pierres-MacBook-Pro:~ pierre$ cd desktop
Pierres-MacBook-Pro:desktop pierre$ cp test1.txt test2.txt
Pierres-MacBook-Pro:desktop pierre$ cp test1.txt cours
Pierres-MacBook-Pro:desktop pierre$ cp test1.txt test2.txt cours
Pierres-MacBook-Pro:desktop pierre$ cp -R cours cours-copie
```

5. Comment afficher le contenu d'un fichier texte dans le terminal ?

- ▶ a) cat
- ▶ b) ls
- ▶ c) more
- ▶ d) Les deux (a) et (c)

Réponse:

- ▶ d) Les deux (a) et (c)



Niveau Intermédiaire

6. Quelle commande permet de rechercher un fichier nommé “document.txt” dans le répertoire courant et ses sous-dossiers ?
- ▶ a) find . -name "document.txt"
 - ▶ b) grep document.txt
 - ▶ c) locate document.txt
 - ▶ d) search document.txt

Réponse:

► a) `find . -name "document.txt"`

The screenshot shows a terminal window with the following content:

find command cheat sheet bashsenpai.com

Basic Format

```
find [path] [expression]
```

Key Expressions

-name pattern	⇒ Search for a file by its name
-iname pattern	⇒ Case insensitive search
-user name	⇒ Search for files owned by user 'name'
-group name	⇒ Search for files belonging to group 'name'
-mtime n	⇒ Search for files modified n*24 hours ago
-size n[cwbkMG]	⇒ Search for files of size n. Add suffixes for specific units c=bytes, w=two-byte words, b=512 bytes, k=kilobytes, M=megabytes, G=gigabytes
-perm mode	⇒ Search for files with specific permissions
-type [bcdpflsD]	⇒ Search for files of a specific type b=block, c=character, d=directory, p=pipe f=normal file, l=symbolic link, s=socket, D=door
-exec command {} \;	⇒ Execute 'command' on each file found
-delete	⇒ Delete files found (use cautiously)

Examples

find / -name filename	⇒ Find a file called 'filename' in root directory
find /home/user -name '*.txt'	⇒ Find all .txt files in /home/user directory
find / -user username	⇒ Find all files owned by 'username' in root directory
find / -type f -empty	⇒ Find all empty files in root directory
find / -type d -empty	⇒ Find all empty directories in root directory
find / -name '*.tmp' -size +500k	⇒ Find .tmp files larger than 500k in root directory
find / -type f -perm 0666	⇒ Find files with permissions 0666 in root directory
find / -name '*.bak' -type f -delete	⇒ Find and delete all .bak files in root directory
find / -type f -mtime -7	⇒ Find files modified within the last 7 days in root directory
find / -name '*.jpg' -exec mv {} /tmp \;	⇒ Find all .jpg files and move them to the /tmp directory

7. Comment ajouter du texte à la fin d'un fichier sans l'écraser ?

- ▶ a) echo "texte" > fichier.txt
- ▶ b) echo "texte" >> fichier.txt
- ▶ c) cat > fichier.txt
- ▶ d) cat >> fichier.txt

Réponse:

- ▶ d) cat >> fichier.txt

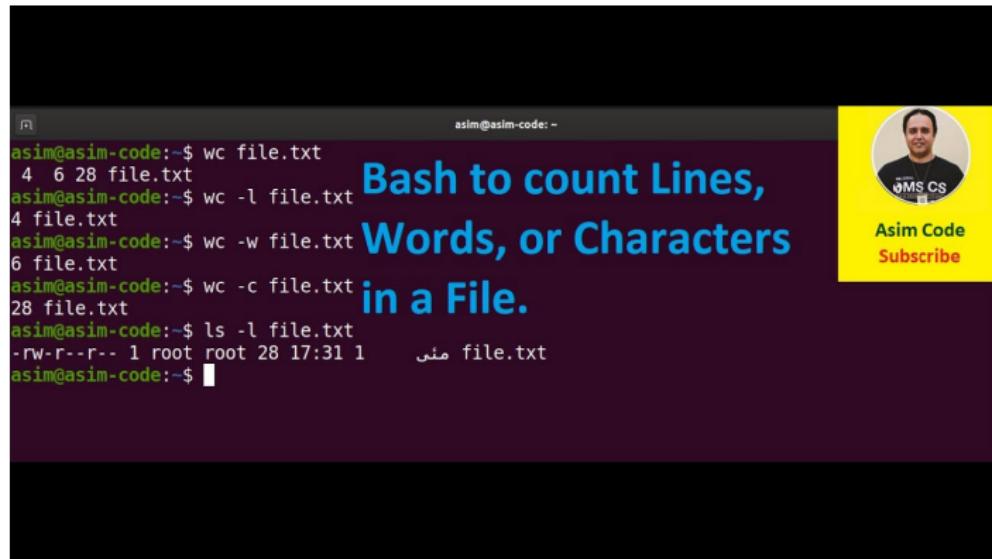
```
[jayeshkumar@localhost ~]$ cat file1 >> file2
[jayeshkumar@localhost ~]$ cat file1
this is file1
[jayeshkumar@localhost ~]$ cat file2
this is file2
this is file1
[jayeshkumar@localhost ~]$ █
```

8. Quelle commande permet de compter le nombre de lignes, mots et caractères dans un fichier ?

- ▶ a) grep
- ▶ b) wc
- ▶ c) awk
- ▶ d) cut

Réponse:

- ▶ b) wc



The screenshot shows a terminal window with a black background and white text. It displays several commands and their outputs related to the wc command:

```
asim@asim-code:~$ wc file.txt
4 6 28 file.txt
asim@asim-code:~$ wc -l file.txt
4 file.txt
asim@asim-code:~$ wc -w file.txt
6 file.txt
asim@asim-code:~$ wc -c file.txt
28 file.txt
asim@asim-code:~$ ls -l file.txt
-rw-r--r-- 1 root root 28 17:31 1    مني file.txt
asim@asim-code:~$ █
```

Overlaid on the terminal window is a large blue text block:

**Bash to count Lines,
Words, or Characters
in a File.**

In the top right corner of the terminal window, there is a yellow sidebar with a circular profile picture of a man, the text "Asim Code", and a "Subscribe" button.

9. Quelle commande liste tous les fichiers, y compris les fichiers cachés ?

- ▶ a) ls
- ▶ b) ls -a
- ▶ c) ls -l
- ▶ d) ls -h

Réponse:

► b) ls -a

```
world-hello_ru@world-hello:/etc/xml$ ls -lai
total 32
3145859 drwxr-xr-x  2 root root  4096 aar  1 14:33 .
3145729 drwxr-xr-x 130 root root 12288 okt 26 00:29 ..
3148660 -rw-r--r--  1 root root   756 aar  1 14:33 catalog
3148661 -rw-r--r--  1 root root   610 aar  1 14:33 catalog.old
3148662 -rw-r--r--  1 root root   840 aar  1 14:33 xml-core.xml
3148663 -rw-r--r--  1 root root   673 aar  1 14:33 xml-core.xml.old
world-hello_ru@world-hello:/etc/xml$ ls -l --all --inode
total 32
3145859 drwxr-xr-x  2 root root  4096 aar  1 14:33 .
3145729 drwxr-xr-x 130 root root 12288 okt 26 00:29 ..
3148660 -rw-r--r--  1 root root   756 aar  1 14:33 catalog
3148661 -rw-r--r--  1 root root   610 aar  1 14:33 catalog.old
3148662 -rw-r--r--  1 root root   840 aar  1 14:33 xml-core.xml
3148663 -rw-r--r--  1 root root   673 aar  1 14:33 xml-core.xml.old
```

10. Quelle commande affiche uniquement les lignes d'un fichier contenant un mot spécifique, par exemple "erreur" ?

- ▶ a) grep erreur fichier.txt
- ▶ b) cat fichier.txt | grep erreur
- ▶ c) Les deux (a) et (b)
- ▶ d) find "erreur" fichier.txt

Réponse:

- c) Les deux (a) et (b)

```
st0ne@st0ne:~$ ps -aux |grep bash
root    2346  0.0  0.0  6928 1120  pts/1    S+   13:49  0:00 -bash
st0ne    5776  0.0  0.1  8848 2980  pts/4    Ss   14:18  0:00 -bash
st0ne   26958  0.0  0.2  8700 4684  pts/4    S   16:23  0:00 bash
st0ne   26979  0.0  0.2  8716 4604  pts/3    Ss   16:23  0:00 -bash
root   27001  0.0  0.1  7672 3684  pts/3    S+   16:23  0:00 bash
st0ne   28156  0.0  0.0  6852  836  pts/4    S+   17:04  0:00 grep --color=auto bash
st0ne@st0ne:~$
```

Niveau Avancé

11. Comment rediriger à la fois la sortie standard et les erreurs d'une commande vers un fichier ?

- ▶ a) commande > fichier.txt 2>&1
- ▶ b) commande >> fichier.txt
- ▶ c) commande > fichier.txt
- ▶ d) commande 2> fichier.txt

Réponse:

commande > fichier.txt 2>&1

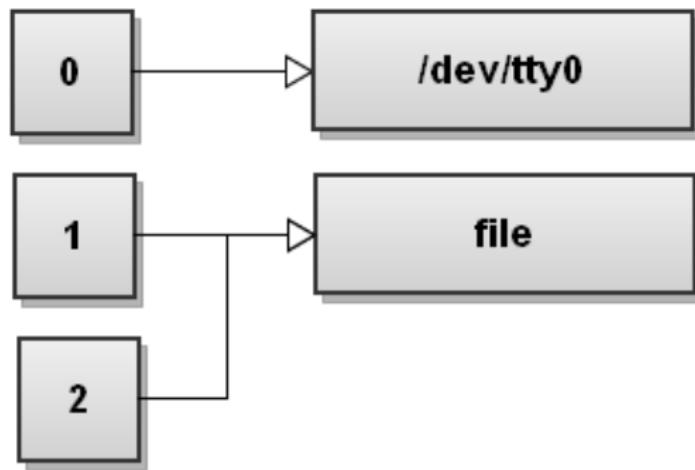


Figure 1: “file descriptor”

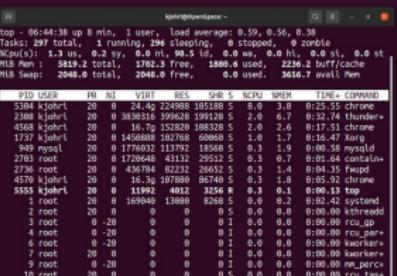
12. Quelle commande est utilisée pour afficher les processus en cours ?

- ▶ a) top
- ▶ b) ps
- ▶ c) htop
- ▶ d) Toutes les réponses précédentes

Réponse:

- d) Toutes les réponses précédentes

top
Command
in
Linux



The screenshot shows the output of the 'top' command on a Linux system. The title bar indicates 'top - 06:44:38 up 8 min, 1 user, load average: 0.59, 0.56, 0.38'. Below it, the 'Tasks' section shows 297 total tasks, with 1 running, 296 sleeping, 0 stopped, and 0 zombie. CPU usage is listed as 1.3 us, 0.2 sy, 0.0 ni, 98.5 id, 0.0 wa, 0.0 hi, 0.0 si, and 0.0 st. Memory usage includes 38319.2 MB total memory, 17921.3 MB free, 18868.6 MB used, 22382.2 MB buff/cache, and 20484.8 MB total swap space, with 20484.0 MB free and 0.0 MB used.

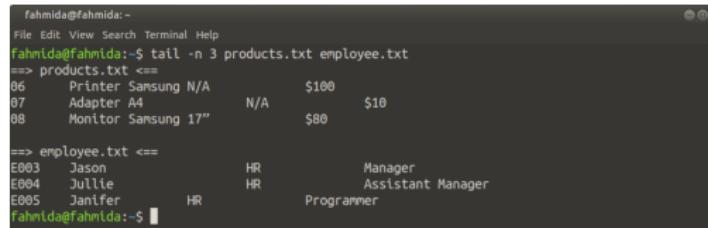
PID	USER	PR	NI	VIRT	RES	%CPU	%MEM	TIME+ (COMMAND)		
2330	kjohrl	20	0	220625	105128	0.0	0.0	0:00.00 [kthreadd]		
2388	kjohrl	20	0	3830314	399628	199128	5.1	6.7	0:03.74 [Thunder+	
4568	kjohrl	20	0	16.7g	157820	108328	5	2.0	0:17.51 [chrome]	
1737	kjohrl	20	0	1456888	182768	66968	5	1.0	1.7	0:16.47 [Xorg]
349	mysql	20	0	1779032	113728	18598	0.1	1.1	0:06.38 [mysqld]	
2781	root	20	0	20.1g	21128	2125	5	1.3	0:00.00 [kworker/0-14]	
2736	root	20	0	456784	82232	26652	5	0.3	1.4	0:04.35 [feproc]
4570	kjohrl	20	0	16.3g	107884	86748	5	0.3	1.8	0:05.92 [chrome]
5555	kjohrl	20	0	11992	4012	3256	0	0.1	0:00.13 [thunderd]	
1	root	20	0	169840	13688	8238	0.0	0.1	0:00.00 [kthreadd]	
2	root	20	0	0	0	0.5	0.0	0:00.00 [kthreadd]		
3	root	0	-20	0	0	0.1	0.0	0:00.00 [rcu_gp]		
4	root	0	-20	0	0	0.1	0.0	0:00.00 [rcu_perf]		
5	root	0	-20	0	0	0.1	0.0	0:00.00 [rcu_bh]		
7	root	20	0	0	0	0.1	0.0	0:00.00 [kworker*]		
9	root	0	-20	0	0	0.1	0.0	0:00.00 [mm_percs]		
10	root	20	0	0	0	0.5	0.0	0:00.00 [rcu_tes*]		

13. Comment afficher les 10 premières lignes d'un fichier ?

- ▶ a) less fichier.txt
- ▶ b) head -n 10 fichier.txt
- ▶ c) tail -n 10 fichier.txt
- ▶ d) cat fichier.txt | head

Réponse:

- b) `head -n 10 fichier.txt`



A screenshot of a terminal window titled "Terminal". The window shows the following command and its output:

```
fahmida@fahmida:~  
File Edit View Search Terminal Help  
fahmida@fahmida:~$ tail -n 3 products.txt employee.txt  
==> products.txt <==  
06     Printer Samsung N/A          $100  
07     Adapter A4                 N/A          $10  
08     Monitor Samsung 17"         $80  
  
==> employee.txt <==  
E003   Jason                  HR          Manager  
E004   Julie                  HR          Assistant Manager  
E005   Janifer                HR          Programmer  
fahmida@fahmida:~$
```

14. Comment rechercher un mot dans plusieurs fichiers et afficher le nom des fichiers contenant ce mot ?

- ▶ a) grep -r "mot" .
- ▶ b) find . -name "mot"
- ▶ c) grep "mot" *
- ▶ d) cat * | grep "mot"

Réponse:

- a) `grep -r "mot" .`

```
vivek@nixcraft-asus:/tmp$ cat demo.txt
List of files:
foo.txt
bar.txt
foo1.txt
bar1.doc
foobar.txt
foo.doc
bar.doc
dataset.txt
purchase.db
purchase1.db
purchase2.db
purchase3.db
purchase.idx
foo2.txt
bar.txt
vivek@nixcraft-asus:/tmp$ grep 'purchase' demo.txt
purchase.db
purchase1.db
purchase2.db
purchase3.db
purchase.idx
vivek@nixcraft-asus:/tmp$ grep 'purchase.' demo.txt
purchase.db
purchase1.db
purchase2.db
purchase3.db
purchase.idx
vivek@nixcraft-asus:/tmp$ grep 'purchase.db' demo.txt
purchase.db
vivek@nixcraft-asus:/tmp$ grep 'purchase..db' demo.txt
purchase1.db
purchase2.db
purchase3.db
vivek@nixcraft-asus:/tmp$
```

- 15. Quelle commande permet d'archiver et de compresser un répertoire en utilisant tar et gzip ?**
- ▶ a) tar -cvf archive.tar.gz dossier
 - ▶ b) tar -czvf archive.tar.gz dossier
 - ▶ c) gzip archive.tar dossier
 - ▶ d) zip archive dossier

Réponse:

- b) `tar -czvf archive.tar.gz dossier`

```
sagar@LHB:~/TAR$ tar -zcvf NewFile.tar.gz --exclude-from="exclude.txt" .
./
./Bash.sh
./TextFile.txt
./exclude.txt
./Sub-Directory-2/
./Sub-Directory-1/
./Sub-Directory-1/TextFile.txt
./Sub-Directory-1/MyMusic.mp3
tar: ..: file changed as we read it
```