

Niveau Débutant

1. Quelle commande affiche les fichiers et dossiers du répertoire courant ?

- ▶ a) `ls`
- ▶ b) `pwd`
- ▶ c) `cd`
- ▶ d) `cp`

Réponse:

► a) `ls`

`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 690G 20 Sep 16:33 memories.avi
```

Permissions	Owner	Group	Others	Number of Links	User	Group	Size	Day	Month	Time	Filename
r--read							B=byte				
w--write							K=kilobyte				
x--execute							M=megabyte				
							G=gigabyte				
							T=terabyte				

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 pwd, which usually
      differs from this one.  For detailed information about the ver-
```

A cartoon illustration of Tux, the Linux mascot, a black and white penguin with a yellow beak and feet, standing in the center of the terminal window.

4. **Quelle commande est utilisée pour copier un fichier ?**

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

Réponse:

▶ b) cp

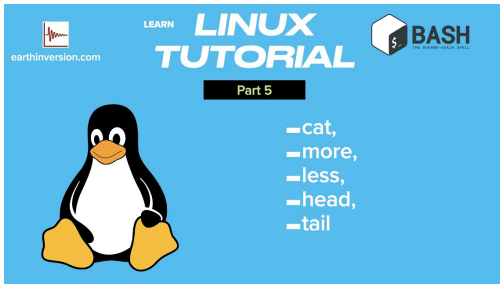
```
Pierres-MacBook-Pro:~ pierre$ cd desktop
Pierres-MacBook-Pro:desktop pierre$ cp test1.txt test2.txt
Pierres-MacBook-Pro:desktop pierre$ cp test1.txt cours
Pierres-MacBook-Pro:desktop pierre$ cp test1.txt test2.txt cours
Pierres-MacBook-Pro:desktop pierre$ cp -R cours cours-copie
```


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"`

find

command cheat sheet

bashsenpai.com

Basic Format

`find [path] [expression]`

Key Expressions

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

Examples

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

```
asim@asim-code: ~  
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 مئی file.txt  
asim@asim-code:~$
```

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



Asim Code
Subscribe

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 abr  1 14:33 .
3145729 drwxr-xr-x 130 root root 12288 okt 26 00:29 ..
3148660 -rw-r--r--    1 root root   756 abr  1 14:33 catalog
3148661 -rw-r--r--    1 root root   610 abr  1 14:33 catalog.old
3148662 -rw-r--r--    1 root root   840 abr  1 14:33 xml-core.xml
3148663 -rw-r--r--    1 root root   673 abr  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 abr  1 14:33 .
3145729 drwxr-xr-x 130 root root 12288 okt 26 00:29 ..
3148660 -rw-r--r--    1 root root   756 abr  1 14:33 catalog
3148661 -rw-r--r--    1 root root   610 abr  1 14:33 catalog.old
3148662 -rw-r--r--    1 root root   840 abr  1 14:33 xml-core.xml
3148663 -rw-r--r--    1 root root   673 abr  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   6920  1120 tty1      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

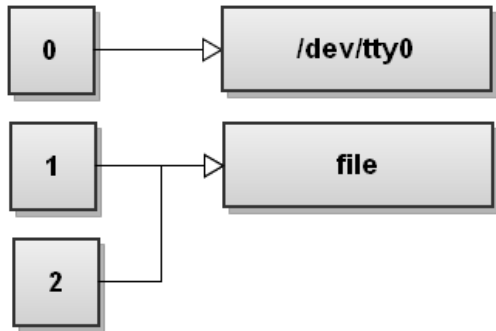


Figure 1: “file descriptor”

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

```
top - 06:44:38 up 8 min, 1 user, load average: 0.59, 0.56, 0.38
Tasks: 297 total, 1 running, 296 sleeping, 0 stopped, 0 zombie
kswapd(): 1.3 vs, 0.2 sy, 0.0 ni, 98.5 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MIB Mem: 5819.2 total, 1782.3 free, 1889.6 used, 2236.2 buff/cache
MIB Swap: 2048.0 total, 2048.0 free, 0.0 used, 3656.7 avail Mem

  PID USER      PR  NI  VIRT  RES  SHR  S  %CPU  %MEM     TIME+ COMMAND
 5384 kjohrt    20   0 24.4g 22488 10518  S   6.0   3.8   0:25.55 chrome
 2868 kjohrt   20   0 383656 39628 109120  S   2.0   6.7   0:32.74 thunder+
 4568 kjohrt   20   0 16.7g 152820 188328  S   2.0   2.6   0:17.51 chrome
 1737 kjohrt   20   0 145888 182768 60660  S   1.0   1.7   0:16.47 Xorg
 949 mysqld   20   0 1776032 113792 18560  S   0.3   1.9   0:00.58 mysqld
 2783 root       20   0 1728648 43132 29532  S   0.3   0.7   0:01.64 contain+
 2736 root     20   0 436784 82232 26632  S   0.3   1.4   0:04.35 HeidiP
 4576 kjohrt   20   0 16.3g 187880 86740  S   0.3   1.8   0:05.02 chrome
 5555 kjohrt   20   0 11992 4812 3256  R   0.3   0.1   0:00.13 top
 1 root       20   0 169040 13880 8268  S   0.6   0.2   0:02.42 systemd
 2 root       20   0 0 0 0  S   0.0   0.0   0:00.00 sshd
 3 root       20   0 0 0 0  S   0.1   0.0   0:00.00 rcu_gp
 4 root       20   0 0 0 0  S   0.1   0.0   0:00.00 rcu_per+
 6 root       20   0 0 0 0  S   0.1   0.0   0:00.00 kworker+
 7 root       20   0 0 0 0  S   0.1   0.0   0:00.00 kworker+
 9 root       20   0 0 0 0  S   0.1   0.0   0:00.00 mld_per+
10 root       20   0 0 0 0  S   0.5   0.0   0:00.00 rcu_test
```


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``

```
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    Jullie                 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 -czvf 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
```