

- **echo** *STR*
- **cd** *DIR*
- **adduser** *USERID*
- **passwd** *USERID*
- **mkdir** *DIR...*
 - mode=MODE
Set file mode using chmod.
 - p, --parents
Make parent directories as needed.
- **rmdir** *DIR...*
 - p, --parents
Remove *DIR* and its ancestors.
- **cat** *FILE...*
Concatenate *FILE(s)*, or stdin to stdout.


```
cat > A.txt
```

Read data from stdin and store data to a A.txt.
Type [ctrl+D] to finish.


```
cat < A.txt
```

Print A.txt file to stdout.


```
cat A.txt B.txt > AB.txt
```

Merge A.txt with B.txt, then print into AB.txt.
- **chmod** *MODE FILE...*


```
chmod 751 FILE
```

```
chmod u=rwx,g=rx,o=x FILE
```

r	w	x	r	w	x	r	w	x
1	1	1	1	0	1	0	0	1


```
chmod =r FILE
```

```
chmod 444 FILE
```

```
chmod a-wx,a+r FILE
```

r	w	x	r	w	x	r	w	x
1	0	0	1	0	0	1	0	0
- **cp** *SRC_FILE DST_FILE*
cp *SRC_FILE... DST_DIR*
- **mv** *SRC_FILE DST_FILE*
mv *SRC_FILE... DST_DIR*
- **rm** *FILE...*
- **who**
Show who is logged on.
- **ls** *NAME...*
 - l
List one file per line.
 - a, --all
List all files, including hidden files; such as [.], [...]
 - l
Long listing format, provides details.
 - h, --human-readable
With [-l], print sizes in human readable format.
 - R, --recursive
List subdirectories recursively.
- **grep** *PATTERN [FILE]...*
Searches the *FILE(s)* for lines containing a match to the given *PATTERN*.
 - A *NUM*, --after-context=*NUM*
Print *NUM* lines of trailing context after matching lines.
 - B *NUM*, --before-context=*NUM*
Print *NUM* lines of leading context before matching lines.
 - b, --byte-offset
Print the 0-based byte offset within the input file before each line of output.
 - c, --count
Print a count of matching lines for each input file.
 - n, --line-number
Prefix each line of output with 1-based.
 - R, -r, --recursive *PATTERN [NAME]...*
Read all files under each directory, recursively.
- **gzip/gunzip** *[FILE]...*
 - c, --stdout, --to-stdout


```
gzip FILE...
```

Compress *FILE...* to *FILE.gz...* than remove original.


```
gzip -c FILE > DST.gz
```

Not remove original. Suffix .gz important.
- **tar** *[FILE]...*
 - ```
tar -cvf DST.tar FILE...
```

  
Create *FILE...* to *FILE.tar* verbosely.
  - ```
tar -czf DST.tar.gz FILE...
```
 - ```
tar -xzf SRC_FILE.tar.gz [-C DST_DIR]
```

- **ps**  
Displays information about a selection of the active processes.
- **top**  
Program provides a dynamic real-time view of a running system. It can display system summary information as well as a list of tasks currently being managed by the Linux kernel.
- **w [USERID]**  
displays information about the users currently on the machine, and their processes.
- **kill [-s SIGNAL|-p] PID**  
Sends the specified signal to the specified process or process group. If no signal is specified, the TERM signal is sent. The TERM signal will kill processes which do not catch this signal. For other processes, it may be necessary to use the KILL (9) signal, since this signal cannot be caught.  
  
`kill -9 PID`  
Force *PID* to terminate.
- **df**  
Report the amount of disk space on all mounted file systems
- **dmesg**  
Used to examine or control the kernel ring buffer.
- **du [FILE]...**  
Summarize disk usage of each *FILE*, recursively for directories.
- **free**  
Report the amount of disk space on all mounted file systems
- **history [-c|-d OFFSET|NUM]**  
Print *NUM* commands in history list.  
  
-c  
Clear the history list by deleting all the entries.  
  
-d *OFFSET*  
Delete the history entry at position *OFFSET*.
- **ping [HOSTNAME|IP]**
- **ifconfig [INTERFACE [OPTS|ADDR]]**  
Assign an address to a network interface and/or configure network interface parameters  
  
OPTS are...  
  
up  
Causes the interface to be activated.  
  
down  
Causes the driver for this interface to be shut down.  
  
`ifconfig eth0 ADDR`  
Change eth0 IP with *ADDR*.  
  
`Ifconfig eth0 down`  
Stop eth0 interface.
- **alias [-p] [NAME[=VALUE]...]**  
Alias frequently used command.  
  
`alias cpf='cp -rf'`  
Type "cpf" then, it executes "cp -rf".
- **fdisk**  
  
Partition table manipulator. Hard disk can be divided into one or more logical disks called partitions.
- **apt-get**  
  
APT package handling utility. Command-line tool for handling packages, and may be considered the user's "back-end" to other tools using the APT library.