0 commands

terminal(shell)は命令(command)を受け取って，被演算子(operand)に演算を加える．オプションによってその振る舞いを調整する．

```
> ls -lat
```

command prompt / com / options

'-' short options
-l : long
-a : all
-t : time

'--' long options
--version

```
> ls
    > ls
    command/   dir/      file/      line_edit/
    > ls -lat
    total 0
    drwxr-xr-x  5 bob  staff  160 11  3 14:46 .semi_lattice/
    drwxr-xr-x  7 bob  staff  224 11  3 14:45 ./
    drwxr-xr-x  2 bob  staff   64 11  3 14:45 line_edit/
    ...
> pwd [.] #print working dir
    > pwd
    /Users/bob/Desktop/lecture_25f/multi_scale_25f/linux_basic
> man ls
```

operator operand
演算子　被演算子

```
LS(1)                  General Commands Manual                LS(1)

NAME
     ls – list directory contents

SYNOPSIS
     ls [-@ABCFGHILOPRSTUWabcdefghiklmnopqrstuvwxy1%,]
        [--color=when] [-D format] [file ...]

DESCRIPTION
     For each operand that names a file of a type other than
     directory, ls displays its name as well as any requested,
     associated information.  For each operand that names a
     file of type directory, ls displays the names of files
     contained within that directory, as well as any requested
     associated information.
```

q(quit)で終了

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1 dir commands

```
> mkdir hoge
> rmdir hoge
> full_path, absolute_path, 絶対パス
  ▷ readlink -f linux_basic.key.pdf
  /Users/bob/Desktop/Lectures/MultiScale/multi_scale_25f/w7_bundle/linux_basic.key.pdf
  ▷ realpath linux_basic.key.pdf
  /Users/bob/Desktop/Lectures/MultiScale/multi_scale_25f/w7_bundle/linux_basic.key.pdf
    > relative_path, 相対パス
> ls [.]
> ls ..                > tree -L 3
#above dir               > sudo apt install tree

                       multi_scale_25f/
> cd bin               │    bin
> cd ..                │    ├── auto_git
> cd [~]               │    ├── linux_bins
#tilde home            │    ├── mk_cli_copilot
                       │    │    ├── auto_git
                       │    │    └── chat_form
                       │    └── tidy
                       │    linux_basic
                       │    ├── command
                       │    ├── dir
                       │    ├── file
                       │    └── line_edit
                       │    readme.html
> open .
```
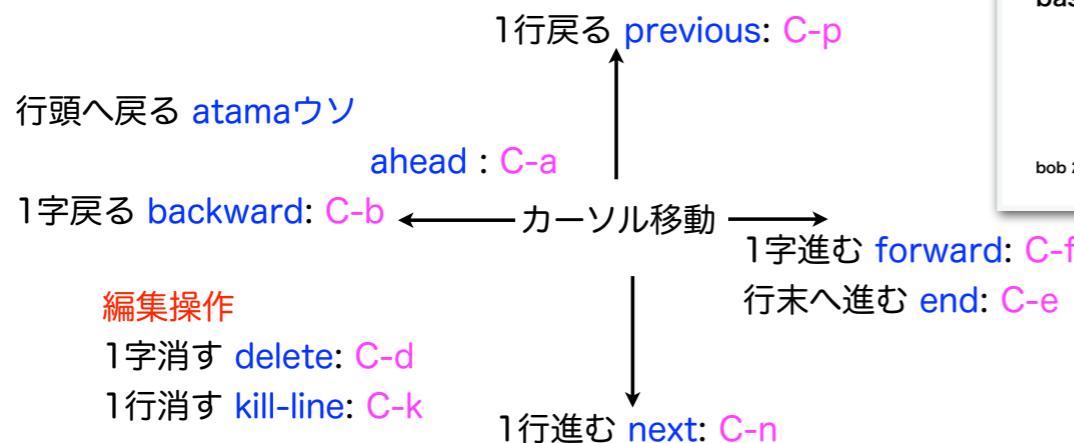
---

2 file commands

```
> mv A_file B_file
#rename A_file to B_file
  > mv A_file B_dir
  #move A_file to B_dir
  > mv * B_dir
  #move *(wild card, all files) to B_dir

> rm A_file
#remove A_file
  > rm -rf B_dir
  #remove recursively
   and forcibly B_dir

> cp A_file B_file
#copy A_file to B_file
  > cp A_file B_dir
  #copy A_file in B_dir
```

---

3 text commands

```
> cat A_file
#catenate A          > bat A_file
                       > sudo apt install bat
> head A_file
  > tail A_file

> wc A_file
#word count A

> grep string A_file
#search string in A

> diff A_file B_file
#show diff btw A B
```

---

4 process commands

```
> ps
#process status

> fg
#fore ground
  > bg
  #back ground

> kill -9 pid
#kill forcibly pid process

pid : process ID
```

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5 line edit key bind

1行戻る previous: C-p

行頭へ戻る atamaウソ

ahead : C-a

1字戻る backward: C-b ← カーソル移動 → 1字進む forward: C-f

行末へ進む end: C-e

編集操作
1字消す delete: C-d
1行消す kill-line: C-k

1行進む next: C-n

```
> my_help l kick_off edit
    -                c-p(previ…
    - c-a(ahead), c-b(back), c-…
    -                c-n(next)
    - c-d(delete), c-k(kill-lin…
    - c-y(yank, paste)
```

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linux basics

basic commands

bob 2025/11/3