

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。

command prompt

```
> ls -lat
```

command prompt command options

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

'--' long options
--version

```
> ls
```

```
> ls
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 [-@ABCFGHILOPRSTUWabcfgghiklmnopqrstuvwxy1%,]
[--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

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 ..
```

#above dir

```
> tree -L 3
```

```
> sudo apt install tree
```

```
multi_scale_25f/
├── bin
│   ├── auto_git
│   ├── linux_bins
│   ├── mk_cli_copilot
│   ├── auto_git
│   └── chat_form
├── tidy
├── linux_basic
│   ├── command
│   ├── dir
│   ├── file
│   ├── line_edit
│   └── readme.html
```

```
> cd bin
```

```
> cd ..
```

```
> cd [~]
```

#tilde home

```
> open .
```

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

linux basics

basic commands

bob 2025/11/3

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

```
> my_help 1 kick_off edit
```

- c-p(previous)
- c-a(ahead), c-b(back), c-f(forward)
- c-n(next)
- c-d(delete), c-k(kill-line)
- c-y(yank, paste)