

Navigating using terminal

pwd

print path of current directory

```
$ pwd
/home/ryan/Documents
```

cd [location]

move to another directory

```
$ cd /home/ryan/Documents
```

[location]

- ~ home directory
- . current directory
- .. parent directory

```
$ cd ~/Documents
```

ls [options] [location]

list the files in a directory

```
$ ls // list files in current directory
file1 file2 Dir1
$ ls home/ryan/Documents
file1 file2 Dir1
```

[options]

-l – list files with details

```
$ ls -l home/ryan/Documents
total 3
-rw-rw-r-- 1 ryan users 489 Oct 1 20:10 file1
-rw-rw-r-- 1 ryan users 582 Oct 1 20:10 file2
drwxrwxr-x 5 ryan users 398 Oct 1 20:10 Dir1
```

-a – list hidden files

```
$ ls -a home/ryan/Documents
. .. .hiddenFile1 file1 file2 Dir1
// note hidden file start with .
```

File & Directory

touch [options] <filename>

create a blank file

```
$ touch file1 //create in current directory
$ touch /home/file1 // create in /home
```

mkdir [options] <Directory>

create a directory

```
$ mkdir Directory1
$ mkdir /home/Directory1
```

cp [options] <source> <destination>

copy a file from source to destination,

```
$ cp file1 /home/ryan/file1
$ cp file1 file2 //duplicate file1 with file2
```

[options]

r – stand for recursive, needed to copy a directory

```
$ cp -r Directory1 Directory2
```

mv [options] <source> <destination>

move source file or directory to destination

```
$ mv file1 /home/file1 // move file1 to /home
```

can also be used to rename a file

```
$ mv file1 file2 // rename file1 to file2
```

rm [options] <file>

remove file

```
$ rm file1
```

[options]

r – stand for recursive, needed to rm a directory

```
$ rm -r Document
```

rmdir [options] <Directory>

remove a directory

```
$ rmdir /home/ryan/Documents
```

Filters

cat [file path]

print content of a file to terminal

```
$ cat example.txt
Fred apples 20
Susy oranges 5
Mark watermellons 12
```

head [-number of lines to print] [file path]

tail [-number of lines to print] [file path]

print first/last few lines of a file to terminal

```
$ head -2 example.txt
Fred apples 20
Susy oranges 5
$ tail -1 example.txt
Mark watermellons 12
```

sort [options] [path]

sort the file, default sort lines in a file alphabetically

```
$ sort example.txt
Fred apples 20
Mark watermellons 12
Susy oranges 5
```

Piping and Redirection

[command] > [file path]

save output to a file

```
$ ls home/ryan/Documents > example.txt
$ cat example.txt
file1
file2
Dir1
```

[command] >> [file path]

append output to a file

```
$ ls home/ryan/Documents > example.txt
$ cat example.txt
Fred apples 20
Susy oranges 5
Mark watermellons 12
file1
file2
Dir1
```

[command] | [command] | ...

Use one command's output as another's input

```
$ ls -l home/ryan/Documents | tail -2
-rw-rw-r-- 1 ryan users 582 Oct 1 20:10 file2
drwxrwxr-x 5 ryan users 398 Oct 1 20:10 Dir1
```

Running processes

ps

display information of running processes

```
$ ps
PID  TTY      TIME CMD
1331 pts/0    00:00:00 bash
1889 pts/0    00:00:00 ps
1957 pts/0    00:00:13 process1
```

kill [options] <pid>

```
$ ps
PID  TTY      TIME CMD
1331 pts/0    00:00:00 bash
1889 pts/0    00:00:00 ps
1957 pts/0    00:00:13 processYouWantToKill
$ kill 1957
```

Ctrl+C

Interrupt (kill) the current foreground process running in in the terminal.

Ctrl+Z

Suspend the current running process running