Navigation

pwd – print working directory

```
eureka@ubuntu:~$ pwd
/home/eureka
```

cd – change directory

```
eureka@ubuntu:~/test$ pwd
/home/eureka/test
eureka@ubuntu:~/test$ cd /home/eureka/Desktop
eureka@ubuntu:~/Desktop$ pwd
/home/eureka/Desktop
```

Previous directory cd -, cd ../

```
eureka@ubuntu:~/test$ pwd
/home/eureka/test
eureka@ubuntu:~/test$ cd ../
eureka@ubuntu:~$ pwd
/home/eureka
eureka@ubuntu:~$ cd -
/home/eureka/test
eureka@ubuntu:~/test$ pwd
/home/eureka/test
```

pushd – saves the current working directory in memory

popd – returns path at the top of the directory stack

dirs. – displays currently remembers directories

```
eureka@ubuntu:~$ dirs
~
eureka@ubuntu:~$ pushd Desktop
~/Desktop ~
eureka@ubuntu:~/Desktop$ dirs
~/Desktop ~
eureka@ubuntu:~/Desktop$ popd ~
~/Desktop
eureka@ubuntu:~/Desktop$ dirs
~/Desktop
```

ls

-f does not call stat(). But both ls and find call stat() when certain options are used, such as ls -l or find -mtime. Stat stats the file pointed to by *file_name* and fills in *buf* so can increase the time to run.

-h human readable

-l list

-R recursive

```
eureka@ubuntu:~/test$ ls -lhR
.:
total 4.0K
drwxrwxr-x 3 eureka eureka 4.0K Jul  1 15:59 another_dir

./another_dir:
total 4.0K
drwxrwxr-x 2 eureka eureka 4.0K Jul  1 15:59 final_dir

./another_dir/final_dir:
total 0
```

sort files by size

-S sort by file size

```
eureka@ubuntu:~/test$ ls -lSh
-rw-rw-r--  1 eureka eureka 978K Oct 26  2012 redis-2.6.2.tar.gz
-rw-r--r--  1 eureka eureka 8.3K Jan  9 14:42 examples.desktop
drwxr-xr-x  3 eureka eureka 4.0K Apr 16 10:37 Desktop
```

-a do not ignore entries starting with . (hidden files begin w/ .)

-r reverse order while sorting

-t sort by modification time, newest first

```
eureka@ubuntu:~$ ls -lart
total 1220
drwxrwxr-x  6 eureka eureka    4096 Oct 26  2012 redis-2.6.2
-rw-rw-r--  1 eureka eureka 1000600 Oct 26  2012 redis-2.6.2.tar.gz
drwxr-xr-x  3 root   root      4096 Jan  9 14:42 ..
-rw-r--r--  1 eureka eureka    8445 Jan  9 14:42 examples.desktop
-rw-r--r--  1 eureka eureka     675 Jan  9 14:42 .profile
-rw-r--r--  1 eureka eureka     220 Jan  9 14:42 .bash_logout
```

Show only current directories

```
eureka@ubuntu:~$ ls -d */
Desktop/    epd/           Pictures/     sites/       Videos/
Documents/  learn_pandas/  Public/       Templates/   workspace/
Downloads/  Music/         redis-2.6.2/  test/
```

Show multiple directories

```
eureka@ubuntu:~/Desktop$ ls ~ /usr
/home/eureka:
Desktop     examples.desktop  Pictures            sites      Videos
Documents   learn_pandas      Public              Templates  workspace
Downloads   Music             redis-2.6.2         test
epd         new_test.csv      redis-2.6.2.tar.gz  test_file
/usr:
bin   games   include   lib   local   sbin   share   src
```

find- search for files in a directory

Find empty directories

```
eureka@ubuntu:~/test$ ls -l */*
-rw-rw-r-- 1 eureka eureka    0 Jul  1 16:51 a_dir/test

another_dir/final_dir:
total 0
eureka@ubuntu:~/test$ find . -mindepth 1 -type d -empty
./another_dir/final_dir
```

Find all executable files

find / -type f -perm -o+rx

```
eureka@ubuntu:~$ find / -type f -perm -o+rx | head -5
/etc/acpi/ejectbtn.sh
/etc/acpi/undock.sh
/etc/acpi/webbtn.sh
/etc/acpi/prevbtn.sh
/etc/acpi/powerbtn.sh
```