# **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 -

Move 1 directory up cd ../

Move 2 directories up cd ../../

Etc.

```
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 Is and find call stat() when certain options are used, such as Is -I 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$ 1s -1Sh
-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:
         examples.desktop Pictures
                                                       Videos
Desktop
                                             sites
Documents learn pandas
                          Public
                                             Templates workspace
Downloads Music
                          redis-2.6.2
                                             test
          new test.csv redis-2.6.2.tar.gz test file
epd
/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
```