

# **Basic Linux Commands**

**ls**

list directory contents

```
Terminal
File Edit View Search Terminal Help

gerald@the-proud-dad:Apprentice_Linux_Example$ ls
baboy  baka  manok  okra  patola  talong
gerald@the-proud-dad:Apprentice_Linux_Example$ ls -la
total 56
drwxr-xr-x  5 gerald www-data  4096 Jul  5 07:31 .
drwx----- 62 gerald www-data 16384 Jul  5 07:25 ..
-rw-r--r--  1 gerald www-data    0 Jul  5 07:27 baboy
-rw-r--r--  1 gerald www-data    0 Jul  5 07:27 baka
-rw-r--r--  1 gerald www-data    0 Jul  5 07:27 manok
drwxr-xr-x  2 gerald www-data  4096 Jul  5 07:26 okra
drwxr-xr-x  2 gerald www-data  4096 Jul  5 07:26 patola
drwxr-xr-x  2 gerald www-data  4096 Jul  5 07:26 talong
gerald@the-proud-dad:Apprentice_Linux_Example$ ls -l --author
total 36
-rw-r--r--  1 gerald www-data gerald    0 Jul  5 07:27 baboy
-rw-r--r--  1 gerald www-data gerald    0 Jul  5 07:27 baka
-rw-r--r--  1 gerald www-data gerald    0 Jul  5 07:27 manok
drwxr-xr-x  2 gerald www-data gerald  4096 Jul  5 07:26 okra
drwxr-xr-x  2 gerald www-data gerald  4096 Jul  5 07:26 patola
drwxr-xr-x  2 gerald www-data gerald  4096 Jul  5 07:26 talong
gerald@the-proud-dad:Apprentice_Linux_Example$ █
```

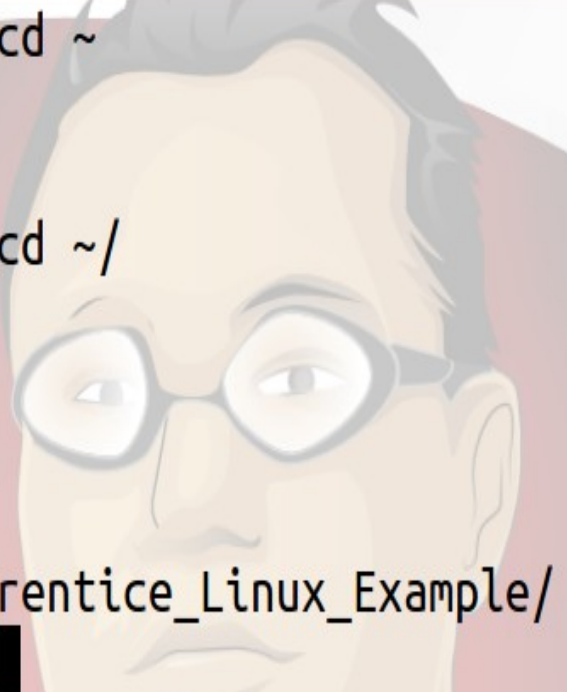
**cd**

change the current directory

Terminal

File Edit View Search Terminal Help

```
gerald@the-proud-dad:Apprentice_Linux_Example$ cd ~
gerald@the-proud-dad:~$ cd -
/home/gerald/Apprentice_Linux_Example
gerald@the-proud-dad:Apprentice_Linux_Example$ cd ~/
gerald@the-proud-dad:~$ cd Scripts/
gerald@the-proud-dad:Scripts$ cd /var/
gerald@the-proud-dad:var$ cd /etc/init.d/
gerald@the-proud-dad:init.d$ cd ../
gerald@the-proud-dad:etc$ cd ../home/gerald/Apprentice_Linux_Example/
gerald@the-proud-dad:Apprentice_Linux_Example$ █
```



**pwd**

print name of current/working directory

**cp**

copy files and directories



Terminal

File Edit View Search Terminal Help

```
gerald@the-proud-dad:Apprentice_Linux_Example$ ls
baboy  baka  manok  okra  patola  talong
gerald@the-proud-dad:Apprentice_Linux_Example$ cp manok sisiw
gerald@the-proud-dad:Apprentice_Linux_Example$ ls
baboy  baka  manok  okra  patola  sisiw  talong
gerald@the-proud-dad:Apprentice_Linux_Example$ cp -r talong torta
gerald@the-proud-dad:Apprentice_Linux_Example$ ls
baboy  baka  manok  okra  patola  sisiw  talong  torta
gerald@the-proud-dad:Apprentice_Linux_Example$ cp -rv * ~/Destination
'baboy' -> '/home/gerald/Destination/baboy'
'baka' -> '/home/gerald/Destination/baka'
'manok' -> '/home/gerald/Destination/manok'
'okra' -> '/home/gerald/Destination/okra'
'okra/talong' -> '/home/gerald/Destination/okra/talong'
'patola' -> '/home/gerald/Destination/patola'
'sisiw' -> '/home/gerald/Destination/sisiw'
'talong' -> '/home/gerald/Destination/talong'
'torta' -> '/home/gerald/Destination/torta'
gerald@the-proud-dad:Apprentice_Linux_Example$ ls ~/Destination/
baboy  baka  manok  okra  patola  sisiw  talong  torta
gerald@the-proud-dad:Apprentice_Linux_Example$ cp -r t* ~/Destination/
gerald@the-proud-dad:Apprentice_Linux_Example$ cp -r *a ~/Destination/
gerald@the-proud-dad:Apprentice_Linux_Example$ cp -r t*a ~/Destination/
gerald@the-proud-dad:Apprentice_Linux_Example$ cp -r *.doc ~/Destination
```



**mv**

move (rename) files

```
Terminal
File Edit View Search Terminal Help

gerald@the-proud-dad:Apprentice_Linux_Example$ ls
baboy baka manok okra patola sisiw talong torta
gerald@the-proud-dad:Apprentice_Linux_Example$ mv torta/ panis_na_torta
gerald@the-proud-dad:Apprentice_Linux_Example$ ls
baboy baka manok okra panis_na_torta patola sisiw talong
gerald@the-proud-dad:Apprentice_Linux_Example$ mv -i manok sisiw
mv: overwrite 'sisiw'? N
gerald@the-proud-dad:Apprentice_Linux_Example$ ls
baboy baka manok okra panis_na_torta patola sisiw talong
gerald@the-proud-dad:Apprentice_Linux_Example$ █
```

**mkdir**

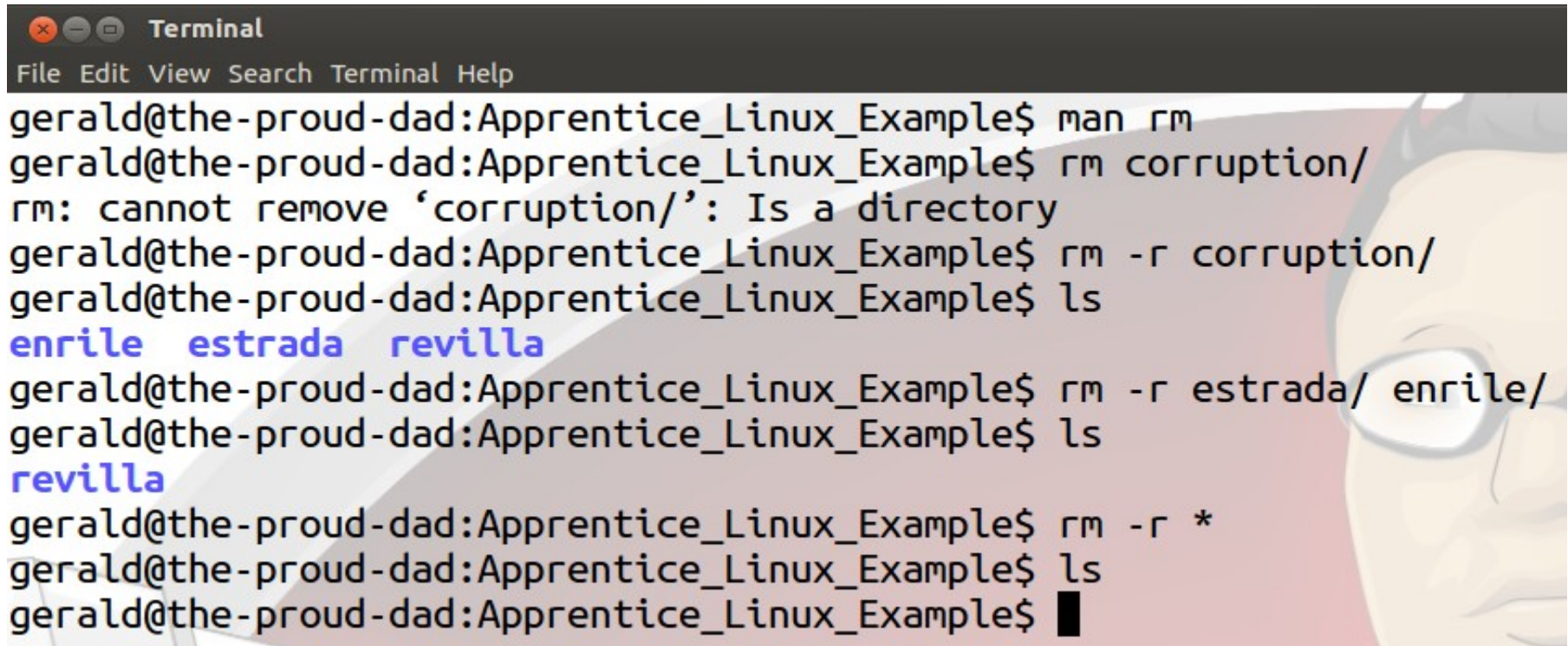
make directories

```
Terminal
File Edit View Search Terminal Help
gerald@the-proud-dad:Apprentice_Linux_Example$ ls
gerald@the-proud-dad:Apprentice_Linux_Example$ mkdir enrile
gerald@the-proud-dad:Apprentice_Linux_Example$ ls
enrile
gerald@the-proud-dad:Apprentice_Linux_Example$ mkdir {revilla,estrada}
gerald@the-proud-dad:Apprentice_Linux_Example$ ls
enrile estrada revilla
gerald@the-proud-dad:Apprentice_Linux_Example$ mkdir -p corruption/pdaf
gerald@the-proud-dad:Apprentice_Linux_Example$ ls
corruption enrile estrada revilla
gerald@the-proud-dad:Apprentice_Linux_Example$ ls corruption/
pdaf
gerald@the-proud-dad:Apprentice_Linux_Example$
```

**rm**

remove files or directories

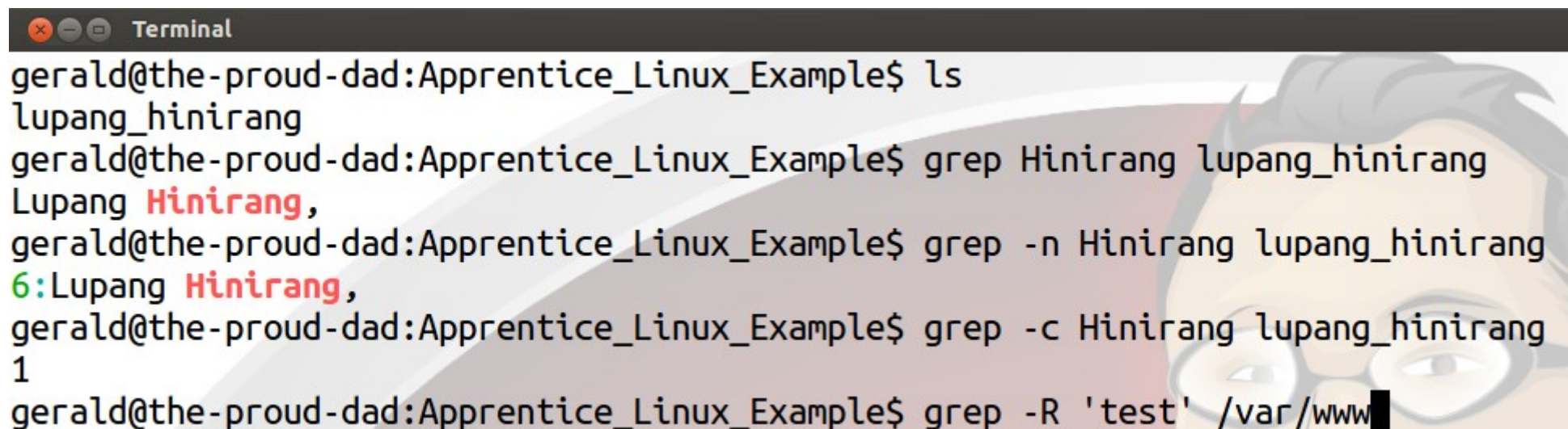




```
Terminal
File Edit View Search Terminal Help
gerald@the-proud-dad:Apprentice_Linux_Example$ man rm
gerald@the-proud-dad:Apprentice_Linux_Example$ rm corruption/
rm: cannot remove 'corruption/': Is a directory
gerald@the-proud-dad:Apprentice_Linux_Example$ rm -r corruption/
gerald@the-proud-dad:Apprentice_Linux_Example$ ls
enrile estrada revilla
gerald@the-proud-dad:Apprentice_Linux_Example$ rm -r estrada/ enrile/
gerald@the-proud-dad:Apprentice_Linux_Example$ ls
revilla
gerald@the-proud-dad:Apprentice_Linux_Example$ rm -r *
gerald@the-proud-dad:Apprentice_Linux_Example$ ls
gerald@the-proud-dad:Apprentice_Linux_Example$
```

**grep**

print lines matching a pattern

A terminal window titled "Terminal" with standard window controls (close, minimize, maximize). The background of the terminal area features a faint, stylized illustration of a man with glasses and a beard. The terminal text shows a series of commands and their outputs:

```
gerald@the-proud-dad:Apprentice_Linux_Example$ ls
lupang_hinirang
gerald@the-proud-dad:Apprentice_Linux_Example$ grep Hinirang lupang_hinirang
Lupang Hinirang,
gerald@the-proud-dad:Apprentice_Linux_Example$ grep -n Hinirang lupang_hinirang
6:Lupang Hinirang,
gerald@the-proud-dad:Apprentice_Linux_Example$ grep -c Hinirang lupang_hinirang
1
gerald@the-proud-dad:Apprentice_Linux_Example$ grep -R 'test' /var/www
```

# **chmod**

change file mode bits

# Permission Table

User	Group	Anonymous	Command
rwX	rwX	rwX	chmod 777
rwX	rwX	r-X	chmod 775
rwX	r-X	r-X	chmod 755
rw-	rw-	r--	chmod 664
rw-	r--	r--	chmod 644

r = Readable

w = writable

x = executable

- = no permission



# Here is another way of looking at it

400	read by owner
040	read by group
004	read by anybody
200	write by owner
020	write by group
002	write by anybody
100	execute by owner
010	execute by group
001	execute by anybody

**chown**

change file owner and group

Terminal

File Edit View Search Terminal Help

```
gerald@the-proud-dad:~$ chown -R gerald Apprentice_Linux_Example/  
gerald@the-proud-dad:~$ cd Apprentice_Linux_Example/  
gerald@the-proud-dad:Apprentice_Linux_Example$ chown gerald *  
gerald@the-proud-dad:Apprentice_Linux_Example$
```

# **sudo**

allows a permitted user to execute a command  
as the superuser or another user, as specified  
by the security policy

```
Terminal
File Edit View Search Terminal Help
gerald@the-proud-dad:www$ ls
cgi-bin  html  index.html
gerald@the-proud-dad:www$ mkdir test
mkdir: cannot create directory 'test': Permission denied
gerald@the-proud-dad:www$ sudo mkdir test
[sudo] password for gerald:
gerald@the-proud-dad:www$ ls
cgi-bin  html  index.html  test
gerald@the-proud-dad:www$
```



**exit**

cause normal process termination

**scp**

secure copy (remote file copy program)

**To copy the file "file.txt" from a remote host to the local host**

```
$ scp user@domain:file.txt /path/to/local/directory
```

**To copy the file "file.txt" from the local host to a remote host**

```
$ scp file.txt user@domain:/path/to/directory
```

**To copy the directory "foo" from the local to a remote host  
directory "bar"**

```
$ scp -r foo user@domain:/path/to/directory/bar
```

**To copy the file "file.txt" from remote host "domain1" to remote  
host "domain2"**

```
$ scp user@domain1:/path/to/directory/file.txt user@domain2:/path/to/directory/
```

# **init.d**

contains a number of start/stop scripts for  
various services on your system

## **To start the service | daemon**

```
$ sudo /etc/init.d/SERVICE_NAME start
```

## **To stop the service | daemon**

```
$ sudo /etc/init.d/SERVICE_NAME stop
```

## **To restart the service | daemon**

```
$sudo /etc/init.d/SERVICE_NAME restart
```

## **To reload service config**

```
$sudo /etc/init.d/SERVICE_NAME reload
```

🌀 **SERVICE\_NAME could be** apache2, mysql, varnish, memcache, **etc**



# Signs & Symbols

**~ or ~/ = home**

**/ = root directory**

**\$ = normal user, or a variable**

**# = root user**

**| = pipe**

# Contacts



geraldvillorente@gmail.com



<https://github.com/geraldvillorente>



<https://www.linkedin.com/in/geraldvillorente>



<http://about.me/gerald.villorente>



gerald.villorente