Content   Objectives

>_ Ubuntu PC   ▾

⊞ Toggle onscreen keyboard

Navigating Basic
Command Syntax

/bin   /media   /usr
/dev   /boot   /mnt
       /etc   /opt   /var
/home   /sbin   /root
       /lib   /proc
           /srv
               /tmp

Options

```
command [options…] [arguments…]
```

Options can be used to alter the behavior of a command. On the previous page, the `ls` command was used to list the contents of a directory. In the following example, the `-l` option is provided to the `ls` command, which results in a "long display" output, meaning the output gives more information about each of the files listed:

```
sysadmin@localhost:~$ ls -l
total 32
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Desktop
drwx------ 4 sysadmin sysadmin 4096 Dec 20  2017 Documents
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Downloads
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Music
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Pictures
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Public
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Templates
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Videos
```

Note that, in the command above, `-l` is a lowercase letter "L".

Often the character is chosen to be mnemonic for its purpose, like choosing the letter *l* for *long* or *r* for *reverse*. By default, the `ls` command prints the results in alphabetical order, so adding the `-r` option will print the results in reverse alphabetical order.

```
sysadmin@localhost:~$ ls -r
Videos  Templates  Public  Pictures  Music  Downloads  Documents  De
```

Multiple options can be used at once, either given as separate options as in `-l -r` or combined like `-lr`. The output of all of these examples would be the same:

```
ls -l -r
ls -rl
ls -lr
```

As explained above, `-l` gives a long listing format while `-r` reverses the listing. The result of using both options is a long listing given in reverse order:

```
sysadmin@localhost:~$ ls -l -r
total 32
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Videos
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Templates
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Public
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Pictures
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Music
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Downloads
drwx------ 4 sysadmin sysadmin 4096 Dec 20  2017 Documents
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Desktop
sysadmin@localhost:~$ ls -rl
total 32
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Videos
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Templates
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Public
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Pictures
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Music
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Downloads
drwx------ 4 sysadmin sysadmin 4096 Dec 20  2017 Documents
drwx------ 2 sysadmin sysadmin 4096 Dec 20  2017 Desktop
```

Ultimately, commands can use many combinations of options and arguments. The possibilities for each command will be unique. Remember the `aptitude` easter egg?

```
sysadmin@localhost:~$ aptitude moo
There are no Easter Eggs in this program.
```

It is possible to alter the behavior of this command using options. See what happens when the `-v` (verbose) option is added:

```
sysadmin@localhost:~$ aptitude -v moo
```

```
There really are no Easter Eggs in this program.
```

By combining multiple `-v` options, we can get a variety of responses:

```
sysadmin@localhost:~$ aptitude -vv moo
Didn't I already tell you that there are no Easter Eggs in this prog
sysadmin@localhost:~$ aptitude -vvv moo
Stop it!
```

Remember multiple options can be denoted separately or combined:

```
aptitude -v -v moo
aptitude -vv moo
```

Keep adding `-v` options to see how many unique responses you can get!