--help and help

coursera.org/learn/linux-for-developers/supplement/A5NLO/help-and-help

Many of the commands on your system will generate a brief discussion of usage and options if you run them with the **--help** option. For example, trying this with **rm** by doing **rm --help** gives the output seen in the screenshot below.

```
File Edit View Search Terminal Help
c7:/tmp>rm --help
Usage: rm [OPTION]... FILE...
Remove (unlink) the FILE(s).
  -f, --force
                        ignore nonexistent files and arguments, never prompt
  -i
                        prompt before every removal
  -I
                        prompt once before removing more than three files, or
                          when removing recursively; less intrusive than -i,
                          while still giving protection against most mistakes
      --interactive[=WHEN]
                            prompt according to WHEN: never, once (-I), or
                          always (-i); without WHEN, prompt always
      --one-file-system when removing a hierarchy recursively, skip any
                          directory that is on a file system different from
                          that of the corresponding command line argument
                          do not treat '/' specially
      --no-preserve-root
      --preserve-root do not remove '/' (default)
  -r, -R, --recursive
                        remove directories and their contents recursively
  -d, --dir
                        remove empty directories
                        explain what is being done
  -v, --verbose
                display this help and exit
      --help
      --version output version information and exit
By default, rm does not remove directories. Use the --recursive (-r or -R)
option to remove each listed directory, too, along with all of its contents.
To remove a file whose name starts with a '-', for example '-foo',
use one of these commands:
 rm -- -foo
  rm ./-foo
Note that if you use rm to remove a file, it might be possible to recover
some of its contents, given sufficient expertise and/or time. For greater
assurance that the contents are truly unrecoverable, consider using shred.
GNU coreutils online help: <http://www.gnu.org/software/coreutils/>
For complete documentation, run: info coreutils 'rm invocation'
c7:/tmp>
```

This is often all you need and can be consumed much quicker than running man or info.

There is also a **help** command, which is actually part of the bash shell, and only gives information about commands which are actually part of the shell itself. Typing **help** by itself generates the screenshot shown below,

```
File Edit View Search Terminal Help
 c7:/home/coop>help
GNU bash, version 4.2.46(1)-release (x86_64-redhat-linux-gnu)
These shell commands are defined internally. Type `help' to see this list.
Type `help name' to find out more about the function `name'.
Use `info bash' to find out more about the shell in general.
Use `man -k' or `info' to find out more about commands not in this list.
 A star (*) next to a name means that the command is disabled.
                                                                                                                                                                                           history [-c] [-d offset] [n] or history -anrw [filen> if COMMANDS; then CO> jobs [-lnprs] [jobspec ...] or jobs -x command [args> kill [-s sigspec | -n signum | -sigspec] pid | jobsp>
    job spec [&]
    (( expression ))
          filename [arguments]
                                                                                                                                                                                            let arg [arg ...]
local [option] name[=value] ...
    [ arg... ]
[[ expression ]]
alias [-p] [name[=value] ... ]
bg [job_spec ...]
bind [-lpvsPVS] [-m keymap] [-f filename] [-q name] [>
                                                                                                                                                                                         logout [n]
mapfile [-n count] [-0 origin] [-s count] [-t] [-u f>
popd [-n] [+N | -N]
printf [-v var] format [arguments]
pushd [-n] [+N | -N | dir]
pwd [-LP]
  bind [-lpvsPVS] [-m keymap] [-f filename] [-q name] [>
break [n]
builtin [shell-builtin [arg ...]]
caller [expr]
case WORD in [PATTERN [| PATTERN]...) COMMANDS ;;]...>
cd [-L][-P [-e]]] [dir]
command [-pVv] command [arg ...]
compgen [-abcdefgjksuv] [-o option] [-A action] [-G >
complete [-abcdefgjksuv] [-pr] [-DE] [-o option] [-A >
complete [-abcdefgjksuv] [-pr] [name ...]
continue [n]
coproc [NAME] command [redirections]
declare [-aAfFgilrtux] [-p] [name[=value] ...]
dirs [-clpv] [+N] [-N]
disown [-h] [-ar] [jobspec ...]
echo [-neE] [arg ...]
exac [-cl] [-a name] [command [arguments ...]] [redir>
exit [n]
export [-fn] [name[=value] ...] or export -p
false
fc [-e ename] [-lpr] [firet] [last] or fc -e [nattern>
                                                                                                                                                                                          pwd [-LP]
read [-ers] [-a array] [-d delim] [-i text] [-n ncha>
readarray [-n count] [-0 origin] [-s count] [-t] [-u>
readonly [-aAf] [name[=value] ...] or readonly -p
return [n]
select NAME [in WORDS ...;] do COMMANDS; done
set [-abefhkmnptuvxBCHP] [-o option-name] [--] [arg >
shift [n]
shopt [-pqsu] [-o] [optname ...]
source filename [arguments]
suspend [-f]
test [expr]
                                                                                                                                                                                            test [expr]
                                                                                                                                                                                            time [-p] pipeline
                                                                                                                                                                                            times
                                                                                                                                                                                            trap [-lp] [[arg] signal_spec ...]
                                                                                                                                                                                           true
                                                                                                                                                                                           type [-afptP] name [name ...]
typeset [-aAfFgilrtux] [-p] name[=value] ...
ulimit [-SHacdefilmnpqrstuvx] [limit]
   false
fc [-e ename] [-lnr] [first] [last] or fc -s [pat=rep>
fg [job_spec]
for NAME [in WORDS ... ]; do COMMANDS; done
for (( exp1; exp2; exp3 )); do COMMANDS; done
function name { COMMANDS ; } or name () { COMMANDS ; >
getopts optstring name [arg]
                                                                                                                                                                                           umask [-p] [-S] [mode]
unalias [-a] name [name ...]
unset [-f] [-v] [name ...]
until COMMANDS; do COMMANDS; done
variables - Names and meanings of some shell variabl>
    hash [-lr] [-p pathname] [-dt] [name ...]
help [-dms] [pattern ...]
                                                                                                                                                                                            while COMMANDS; do COMMANDS; done
                                                                                                                                                                                            { COMMANDS ; }
   7:/home/coop>
```

and information on a particular command can be done as in:

```
$ help pwd
pwd: pwd [-LP]
Print the current working directory. With the -P option, pwd prints
the physical directory, without any symbolic links; the -L option
makes pwd follow symbolic links.
```

It is important to note that there are programs which have two incarnations, one in the bash shell and one as a standalone program. For example, these two commands are similar but not identical:

```
$ echo hello
```

\$ /bin/echo hello

By default, the command built into the shell is invoked, rather than the one in the path. Likewise, the results of **man echo** and **help echo** are not the same. This can be confusing.