coursera

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
      --no-preserve-root do not treat '/' specially
                        do not remove '/' (default)
      --preserve-root
                        remove directories and their contents recursively
  -r, -R, --recursive
  -d, --dir
                        remove empty directories
  -v, --verbose
                        explain what is being done
                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,

1/2

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```
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.
 job_spec [&]
                                                                        history [-c] [-d offset] [n] or history -anrw [filen>
 (( expression ))
                                                                        if COMMANDS; then COMMANDS; [ elif COMMANDS; then CO>
   filename [arguments]
                                                                        jobs [-lnprs] [jobspec ...] or jobs -x command [args>
                                                                        kill [-s sigspec | -n signum | -sigspec] pid | jobsp>
                                                                        let arg [arg ...]
local [option] name[=value] ...
   arg...]
 [[ expression ]]
 alias [-p] [name[=value] ...]
                                                                        logout [n]
                                                                        mapfile [-n count] [-0 origin] [-s count] [-t] [-u f> popd [-n] [+N | -N] printf [-v var] format [arguments]
 bg [job_spec ...
 bind [-lpvsPVS] [-m keymap] [-f filename] [-q name] [>
 break [n]
 builtin [shell-builtin [arg ...]]
                                                                        pushd [-n] [+N | -N | dir]
 caller [expr]
                                                                        pwd [-LP]
 case WORD in [PATTERN [| PATTERN]...) COMMANDS ;;]...>
                                                                        read [-ers] [-a array] [-d delim] [-i text] [-n ncha> readarray [-n count] [-0 origin] [-s count] [-t] [-u>
 cd [-L|[-P [-e]]] [dir]
 command [-pVv] command [arg ...]
                                                                        readonly [-aAf] [name[=value] ...] or readonly -p
compgen [-abcdefgjksuv] [-o option] [-A action] [-G > return [n] complete [-abcdefgjksuv] [-pr] [-DE] [-o option] [-A > select NAM compopt [-o]+o option] [-DE] [name ...]
                                                                        select NAME [in WORDS ...;] do COMMANDS; done
set [-abefhkmnptuvxBCHP] [-o option-name] [--] [arg >
 continue [n]
                                                                        shift [n]
                                                                        shopt [-pqsu] [-o] [optname ...]
source filename [arguments]
 coproc [NAME] command [redirections]
 declare [-aAfFgilrtux] [-p] [name[=value] ...]
dirs [-clpv] [+N] [-N]
                                                                        suspend [-f]
 disown [-h] [-ar] [jobspec ...]
                                                                        test [expr]
                                                                        time [-p] pipeline
 echo [-neE] [arg ...]
 enable [-a] [-dnps] [-f filename] [name ...]
                                                                        times
 eval [arg ...]
                                                                         trap [-lp] [[arg] signal_spec ...]
 exec [-cl] [-a name] [command [arguments ...]] [redir>
                                                                        true
                                                                        type [-afptP] name [name ...]
 exit [n]
                                                                        typeset [-aAfFgilrtux] [-p] name[=value]
ulimit [-SHacdefilmnpqrstuvx] [limit]
 export [-fn] [name[=value] ...] or export -p
 false
                                                                        umask [-p] [-S] [mode]
 fc [-e ename] [-lnr] [first] [last] or fc -s [pat=rep>
                                                                        unalias [-a] name [name ...]
 fg [job_spec]
for NAME [in WORDS ... ] ; do COMMANDS; done
for (( exp1; exp2; exp3 )); do COMMANDS; done
function name { COMMANDS ; } or name () { COMMANDS ; >
                                                                        unset [-f] [-v] [name ...]
until COMMANDS; do COMMANDS; done
                                                                        variables - Names and meanings of some shell variabl>
 getopts optstring name [arg]
                                                                        wait [id]
 hash [-lr] [-p pathname] [-dt] [name ...]
help [-dms] [pattern ...]
                                                                        while COMMANDS; do COMMANDS; done
                                                                        { COMMANDS ; }
c7:/home/coop>
```

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

```
1  $ help pwd
2
3  pwd: pwd [-LP]
4    Print the current working directory. With the -P option, pwd prints
5    the physical directory, without any symbolic links; the -L option
6    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:

```
1 $ echo hello
2 $ /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.

Mark as completed

