

Shell Commands (part 3)

CS 3336

echo

Just print out its string parameters. Often used with variable expansion to generate output from a shell script. Example: `echo "My home is $HOME"`

- **-n** Don't automatically print a newline at the end of the output.

env

Report exported environment variables.

grep

Read from files listed on the command line (or stdin) and report lines that match a given pattern. Usage: `grep pattern file1 file2 ...` Example: `grep "printf" test.h test.c`

- **-v** Report only lines that don't match the given pattern.
- **-c** Don't report matching lines, just print the number of lines that match in each input file.
- **-E** Interpret pattern as extended regular expression syntax (more on this later)
- **-i** Ignore case
- **-n** Prefix each reported match with the line number.
- **-q** Quiet mode. Don't print anything. Just use the exit status to report whether or not a match was found.

find

Recursively search directories to find matching files. By default, just print out matching pathnames. Usage: `find path options`

- **-print** Print out each matching path.
- **-type f** Only report matching files.
- **-type d** Only report matching directories.
- **-mmin -n** Report files modified less than *n* minutes ago.
- **-mmin +n** Report files modified more than *n* minutes ago.

- **-mtime -n** Report files modified less than *n* days ago.
- **-mtime +n** Report files modified more than *n* days ago.
- **-exec command ;** Execute *command* for each matching file.

stat

Display information about files. Usage: `stat options file`

- **-c '%s'** Report size in bytes.
- **-c '%U'** Report name of the owner.
- **-c '%G'** Report group ownership of the file.

sort

Sort lines of given file (or stdin) and output them in sorted order. Usage: `sort file` or `sort`

- **-n** Interpret each line as a number and sort by magnitude.
- **-r** Sort in reverse order.

wc

Report the number of bytes, words and lines in a file.

- **-c** Just report number of bytes.
- **-w** Just report the number of words.
- **-l** Just report the number of lines.

chmod

Change the permissions on a file or directory. Usage: `chmod options file`

- **+x** Add execute permissions.
- **-w** Remove read permissions.
- **u+w** Add write permissions for the user that owns the file.
- **g+r** Add read permissions for the group that owns the file.
- **o-x** Remove execute permissions for others (other than the file's owner or group).
- **a+r** Add read permissions for everyone