

Notes 5

Commands for navigating the file system

LS

- ls is used for listing files and directories.
- By default it will list the current directory when no directory is specified.
- Listing means to see what is inside a directory.
- I use this command whenever I want to "open and see" what is inside a given folder in my Linux system
- I can also use this command when I need to see some information (metadata) of a file. For example, when it was last edited, its size, permissions, etc...

FORMULA/SYNOPSIS

- `ls + option + directory(ies) or file to list`

EXAMPLES

- See all the options of the ls command:
 - `ls --help`
- List all the files including hidden files in current directory:
 - `ls -A`
- Long list a directory
 - `ls -lA ~/Pictures`
- Long list multiple directories excluding group and owner information, with human readable file size and sorted in reverse order.
 - `ls -lhG Documents/ Pictures/`

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1: student@portablevm: ~
student@portablevm:~$ ls --options
ls: unrecognized option '--options'
Try 'ls --help' for more information.
student@portablevm:~$ ls --help
Usage: ls [OPTION]... [FILE]...
List information about the FILES (the current directory by default).
Sort entries alphabetically if none of -cftuvSUX nor --sort is specified.

Mandatory arguments to long options are mandatory for short options too.
-a, --all                do not ignore entries starting with .
-A, --almost-all        do not list implied . and ..
--author                with -l, print the author of each file
-b, --escape             print C-style escapes for nongraphic characters
--block-size=SIZE       with -l, scale sizes by SIZE when printing them;
                        e.g., '--block-size=M'; see SIZE format below

-B, --ignore-backups    do not list implied entries ending with ~
-c                      with -lt: sort by, and show, ctime (time of last
                        change of file status information);
                        with -l: show ctime and sort by name;
                        otherwise: sort by ctime, newest first

-C                      list entries by columns
--color[=WHEN]          color the output WHEN; more info below
-d, --directory          list directories themselves, not their contents
-D, --dired              generate output designed for Emacs' dired mode
-f                      same as -a -U
-F, --classify[=WHEN]   append indicator (one of */=>@|) to entries WHEN
                        likewise, except do not append '*'
--file-type              across, horizontal (-x), commas (-m), long (-l),
                        single-column (-l), verbose (-l), vertical (-C)

--full-time             like -l --time-style=full-iso
-g                      like -l, but do not list owner
--group-directories-first
                        group directories before files
-G, --no-group           in a long listing, don't print group names
-h, --human-readable    with -l and -s, print sizes like 1K 234M 2G etc.
--si                    likewise, but use powers of 1000 not 1024
-H, --dereference-command-line
                        follow symbolic links listed on the command line
--dereference-command-line-symlink-to-dir
                        follow each command line symbolic link
                        that points to a directory

--hide=PATTERN          do not list implied entries matching shell PATTERN
                        (overridden by -a or -A)

--hyperlink[=WHEN]      hyperlink file names WHEN
--indicator-style=WORD  append indicator with style WORD to entry names:
                        none (-d), file (-f), directory (-d), symlink (-l),
                        executable (-x), no execute (-a), no write (-w),
                        no read (-r), no execute no write no read (-a-w-r),
                        no execute no write no read no symlink (-a-w-r-l),
                        no execute no write no read no symlink no group (-a-w-r-l-g),
                        no execute no write no read no symlink no group no
                        permissions (-a-w-r-l-g-p), no execute no write no
                        read no symlink no group no permissions no
                        permissions (-a-w-r-l-g-p-p)

2: student@portablevm: ~
student@portablevm:~$ ls -A
.bash_aliases  pizza_pizza
.bash_history  .pki
.bash_logout   portfolio
.bashrc        .profile
.cache         Public
.cis106        scripts
.config        .ssh
.cuyo          .sudo_as_admin_successful
.Desktop       Templates
.Documents     .var
.dotnet        .vboxclient-clipboard-tty2-control.pid
.Downloads     .vboxclient-clipboard-tty2-service.pid
.face          .vboxclient-draganddrop-tty2-control.pid
.face.icon     .vboxclient-hostversion-tty2-control.pid
.gitconfig     .vboxclient-seamless-tty2-control.pid
.gnupg         .vboxclient-vmvga-session-tty2-control.pid
.local         .vboxclient-vmvga-session-tty2-service.pid
.mozilla       Videos
.Music         .viminfo
.output.png    .vscode
.Pictures      .wget-hsts
student@portablevm:~$ ls -lA ~/Pictures/
total 0
student@portablevm:~$ ls -lhGr Documents/ Pictures/
Pictures/:
total 0
student@portablevm:~$ ls -lhGr Documents/ Pictures/ Downloads/
Pictures/:
total 0
Downloads/:
total 0
Documents/:
total 0
student@portablevm:~$

```

CD

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DESCRIPTION

- `cd + path do directory`

Examples

- Proident culpa enim nulla incididunt quis quis ipsum dolor veniam nulla.
 - `comand here`
- Eiusmod ex duis dolore qui.
 - `command here`
- Amet pariatur excepteur cupidatat aliquip anim sint consectetur laboris ad irure.
 - `command here`

PWD

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FOMULA/SYNOPSIS

- `pwd`

EXAMPLES

- Proident culpa enim nulla incididunt quis quis ipsum dolor veniam nulla.
 - `comand here`

What is a variable?

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How do I use a variable?

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What is an environment variable?

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What is a user defined variable?

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What is the root directory?

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What does “Parent Directory” mean?

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What does “Current working directory” mean?

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What is an absolute path? Include an example

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What is a relative path? Include an example

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What is the difference between “Your home directory” and “The home directory”?

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