

Shell

- pwd: Show current directory
 - o Syntax: pwd
- ls: list the contents of the current directory
 - o Syntax:
 - ls (lists contents of current directory)
 - ls . (lists contents of current directory)
 - ls .. (lists contents of parent directory)
 - ls ~ (lists contents of home directory)
 - ls ~user (lists contents of user's home directory)
 - ls / (lists contents of root directory)
 - ls -l (list of details | long listing format)
 - ls -a (shows hidden files as well)
 - ls -h (show human readable format)
 - ls -R (print all files recursively)
 - ls -S (sort by size in decreasing order)
 - ls -la (list of details including hidden files)
 - ls <directory_name> (lists contents of the directory)
 - ls <dir_name1> <dir_name2> <dir_name3> (lists contents of all directory)
- chmod: change permissions
 - o Syntax:
 - chmod <who>=<mode> <file>
 - chmod <who>+<mode> <file>
 - chmod <who>-<mode> <file>
 - chmod <num><num><num> <file>
 - Leftmost bit is the read bit: 0 or 4
 - Middle bit is the write bit: 0 or 2
 - Rightmost bit is execute bit: 0 or 1
 - o Only owner of file or superuser can run it
- less: only see contents of the file
 - o Syntax: less <filename>
- more: see contents of the file
 - o Syntax: more <filename>
- touch: make a file
 - o Syntax: touch <filename>
- mkdir: make a directory
 - o Syntax: mkdir <directory_name>
- rmdir: remove a directory
 - o Syntax: rmdir <directory_name>
- cd: change directory
 - o Syntax:
 - cd <path>
 - cd .. (Parent directory)
 - cd ~ (Home directory)
 - cd <dir_name> (Change directory to sub-directory)
 - cd ~user (change to user's home directory)

- vi: launch vi text editor to create/edit a file
 - Syntax: vi
- nano: read and write a file from the terminal
 - Syntax : nano <filename>
- cp: copy a file
 - Syntax:
 - cp <src_file1> <src_file2> <src_file3> <dest_dir> (Copies src files to dest_dir)
 - cd <path>/* . (Copies all files in path into current directory)
 - cp ~user/* ~ (Copies files in user's home to the current user's home)
 - cp <file1> <file2> .. (Copies the files into parent directory)
- mv: move or rename a file
 - Syntax:
 - mv <src_file> <dest_file> (Rename src_file to dest_file)
 - mv <src_file> <dest_dir> (Move src_file to dest_dir)
 - mv <src_file1> <src_file2> <src_file3> <dest_dir> (Move src files to dest_dir)
 -
- rm: remove a file
 - Syntax:
 - rm <file> (Remove the file)
 - rm -f (Remove the file forcefully)
 - rm -fi (Remove file forcefully but with prompt)
 - rm -if (Same as rm -f)
- man: display a manual of all the commands
 - Syntax:
 - Man <command_name> (displays the manual page for command)
- cal: calendar of the current month
 - Syntax:
 - cal (Calendar for the current month)
 - cal2019 (Display the calendar of 2019)
- scp: securely copy the file
 - Syntax:
 - scp <file> <dir_name> (Securely copy the file to the directory)
- wc: print # of newlines, words, and bytes in the file
- gzip: compress file using gnu zip
 - Syntax:
 - gzip <filename> (produces <filename>.gz)
- gunzip: decompresses the file
 - Syntax:
 - gunzip <filename> (decompresses the file)
- * : Wildcard
 - Syntax:
 - * (all content)
 - *.* (all content with dot in their names)
 - *-* (all content with dash in their names)

- *.py (all Python source files | all content that ends with .py)
 - *~ (all content that ends with ~)
- head: displays the first few lines of a file
 - Syntax:
 - head <file> (shows first 10 lines of the <file>)
 - head -n <num> <file> (Shows the first <num> lines of text in <file>)
 - head -c <num> <file> (Shows the first <num> bytes of text in <file>)
 - head <myFile> <yourFile> <ourFile> (Prints first 10 lines of all 3 files)
 - head - -help (displays brief usage description and command line options)
- tail: displays the last few lines of a file
 - Syntax:
 - tail <file> (shows last 10 lines of the <file>)
 - tail -n <num> <file> (Shows the last <num> lines of text in <file>)
 - tail -c <num> <file> (Shows the last <num> bytes of text in <file>)
 - tail <myFile> <yourFile> <ourFile> (Prints last 10 lines of all 3 files)
 - tail - -help (displays brief usage description and command line options)
- Redirection:
 - Syntax:
 - < : connects a command's STDIN to the content of a file instead
 - > : redirects STDOUT to replace an output file's existing content
 - >> : redirect STDOUT and append to a file
 - >& :redirects both STDOUT and STDERR to the same place
 - 2> :redirects STDERR only
- Pipes:
 - Syntax: command A | Command B
- find: locates a file within a given directory
 - Syntax:
 - find <start_directory> <criteria>
- grep: searches for a specific patter within a file or a list of files
 - Syntax:
 - Grep <pattern> <file1> <file2>
- sort: sorts the contents of a file into alphabetical or numerical order
 - Syntax:
 - sort <filename>
 - sort -r <filename> (Sorts in reverse)
- cat: displays the contents to STDOUT
- Syntax:
 - cat <file> (displays contents of file)
 - cat > <file> (creates <file> and writes STDIN to <file>)
 - cat <file1> > <file2> (Copies content of file1 to file2)
 - cat <file1> >> <file2> (appends content of file1 to file2)
- ps: displays processes started by the user
 - Syntax:
 - ps (shows processes started by the user)
 - ps -e (lists all processes running on the system)
 - ps -u (lists processes running in user format)

- kill: ends a running process
 - Syntax:
 - kill -9 <process_id> (kills the process by the process_id)
- ctrl-z: suspends the current process
- jobs: returns suspended processes with id number
- fg: returns suspended job to foreground
 - Syntax:
 - fg <job_id> (Returns the process with the job_id to the foreground)
- man: opens the man pages
 - Syntax: man <command or method name>

If working with names with multiple spaces, putting them in double quotes will not require using “\”.

Perl

- File access modes
 - o 'r' : read only
 - o 'w' : create, write, and truncate
 - o 'a' : write, append, and create
 - o 'r+' : read and write
 - o 'w+' : read, write, create, and truncate
 - o 'a+' : read, write, append, and create
- Reserved names:
 - o \$_ : Wildcard for each element
 - o @_ : array of arguments passed in
 - o \$! : IO Error messages
 - o \$. : Current line number in file
- File checks:
 - o -e : Exists
 - o -w : Writable
 - o -l : Symlink
 - o -r : Readable
 - o -x : Executable
 - o -T: Text file