

Bash	File Permissions	Shell Scripting
File system Root Path pwd cd ~ .. .	ls -al rwx owner, group, world r w x r-x 755	grep <word> redirect operator append operator cut -d" " cut -d, -f1,2,4 sort sort -n uniq
ls ls -F ls -l ls -a ls -al mkdir rmdir cp mv rm -i	IF/THEN fi if [ -eq -ne -gt -lt -ge -le = != ELIF read bash <directory> <variable> s>	tr "abc" "-xyz" tr "[:lower:]"[:upper:] new variable variab le1=2 \$(( echo \$<variable> " " ' ' \$USER \$PWD \$HOME \$RANDOM sleep #
UNIX file systems are CASE SENSITIVE Folders are directories <b>Copying and Moving Files</b> General syntax - <i>&lt;command&gt; &lt;source&gt; &lt;target&gt;</i> Examples - <i>cp hello.txt hello_world.txt</i> <b>Notes on cp &amp; mv</b> 'cp' is only top level files, does not get what is in folders only folders on top 'mv' is always recursive 'cp -r' - copies a directory including all its content <b>Invasive Commands</b> 'cp', 'mv', and 'rm' - no recovery possible		print lines matching a pattern (>) send output to file instead of displaying on screen (>>) appends data instead of displaying on screen cut empty columns cuts out only columns 1,2,4 sorts alphabetically sorts numerically removes duplicate lines from a text file; MUST BE SORTED FORT substitute <v1> to <v2> specify all lowercase letters to turn uppercase supply variable name and its value; no spaces inbetween valid; no spaces between equals arithmetic expansion prints <variable value> does not affect use used literally, does not call variables lists current user prints present working directory home directory of current user o and 32767 sleeps for # seconds



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### find

find	search for files
find [where to start searching from][expression to fine][options][what to find]	takes 2 arguments; where to search & what to find; wildcards can be used
find /home -user alice -empty	finds files in the home folder from alice which are empty

### Wildcards & Examples

#### Wildcards

?	matches a single character
*	matches any zero or more characters
[x..y]	matches a range of letters or numbers

#### Examples

ls	lists all files + extensions
ls *.doc	lists only files with .doc extensions
rm -r <target>	removes folders with content; be very careful

### While Loops

while	run until a specific conditions is met
CTRL+C	to close script

### vim - file editor

vim "filena-me"	starts up in command mode
i	insert mode - start typing
:w	write
:q	quit vim type
:wp	save and quit
:q!	quit w/o saving

### vim - file editor (cont)

/word	search towards end of file for first occurrence of word
?	search towards beginning of the file for the word
n	search for next occurrence
N	search for previous occurrence
less	view file contents one screen at a time
head	top of file to see if it is the one you need
head -3	show the first three results
tail	bottom of file to see new log entries
-n	default output of ten line
-n#	changes number of lines outputted
-n & -n#	to be used with head or tail

### YUM

YUM	yellowdog updater modifier - package modifier
su	changes \$ -> #

### chmod

chmod	updates permissions on files and folders
su	grants super user privileges
ls -laF	lists all folders + access
chmod 775 engineering	changes permissions for the engineering folders
chown	change ownership
chgrp	change group
chown dave README	changes owner of README to dave
chgrp sales_grp README	changes the group that can access README to sales_grp

### Encryption

aesencrypt	secret key encryption
-e	encrypt the file
-d	decrypt the file
-p <password>	password to use; if omitted, the command will prompt the user
-o <filename>	output file
md5sum	easy way to generate a checksum
#!	turns list of commands into one
/bin/bash	command // no need for bash ...

### For Loops

for var in <item/directory> do <commands> done	how to format for loops
Sequences	{#..#}
#..#	first # starting value .. second# ending value
#1..#2..#3	#3 is increment between each number series



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