

## Linux Training 2 cheat sheet

### Find command

# find [filepath] [options] [argument]

# find [filepath] -name [filename]

-> search for filename inside the directory

# find [filepath] -ctime 1

-> search for files that changed for last 1 day inside filepath

# find [filepath] -atime 1

-> search for files that accessed for last 1 day inside filepath

# find [filepath] -empty

-> search for empty files inside filepath

# find [filepath] [option] -type [f|d] [filename]

-> search for files according to the file type f for file d for directory

# find [filepath] [options] -exec [command] {} \;

-> finding file according to the options and execute command for the file

Ex: # find [filepath] -empty -type f exec rm -rf {} \;

### File globbing

# ls \*.txt

# ls [Pp]\*.txt

# ls test.\*

# ls [Ww]ether[Rr]eport[1-5]?\*

# ls ?.txt

# ls [^W]ether[^R]eport[1-5]?\*

# ls ????.txt

# ls /dir/\*

# ls test?.txt

# ls [star]\*

## Message Digest

```
# md5sum [file] > test.md5  
# md5sum [file] -c test.md5  
# sha256sum [file] > test.sha256  
# sha256sum [file] -c test.sha256  
# sha512sum [file] > test.sha512  
# sha512sum [file] -c test.sha512
```

## sort command:

```
# sort [file]      # sort -n [file] -> number  
# sort -t "," -k2 [file] -> delimiter type and column to sort  
# sort -u [file]
```

## unique command

```
# uniq [file]      # uniq -c [file]  
# uniq --group [file]
```

## tr command

```
# cat [file] | tr ", " "|"  
# cat [file] | tr -d ", "  
# cat [file] | tr 'A-Z' 'a-z'
```

## cut command:

```
# cut -d [delimiter] -f [#ofColumns] [file]  
# cat [file] list.csv | tr ['delimiter'] ['delimiter'] | cut -f [#ofColumns]
```

paste command

```
# paste [file] [file]
```

```
# paste -d [file] [file]
```

```
# paste -s -d [delimiter] [file] [file]
```

sed tool:

```
# sed -i 's/[Str1]/[Str2]/g' [file]
```

-> changes Str1 to Str2 globally (whole the file)

If -i flag doesn't use it don't changed the file you have the redirect output to a file to save changes

split command:

```
# split [file]          # split -b [#] [file]
```

```
# split -d -n2 [file]   # split -d --verbose -n[#] [file]
```

Declaring local variable

```
# var="variable"      # echo $var
```

```
# bash                # echo $var
```

Making a variable an environment variable

```
# export var="variable" # echo $var
```

```
# bash                # echo $var
```

Unsetting an environment variable

```
# unset var
```

/etc/profile file can be used to adding collecting customized environment variable

Affecting just user environment variable enter add variable to the ~/.bash\_profile file

## stdin, stdout, stderr

```
# cat < [file]

# echo "hello, world!" > [file]

# echo "hello, world!" >> [file] -> appends the file

# error 2> error.txt          # error 2> /dev/null

# error > error.txt 2>&1 -> combining redirection of stdin and stdout
```

tee command: Redirects stdin to a file and terminal

```
# [command] > tee [file]
```

xargs command: execute a command to redirected stdin

```
# find [filepath] [options] > xargs -l {} [command] {}

# find [filepath] [options] > xargs -l {} mv {} [filepath]
```

## Shortcuts

Ctrl+a / Home -> Moves the cursor to the beginning of the

command line

Ctrl+e / End -> Moves the cursor to the end of the command line

Ctrl+u -> Erase the entire line

Ctrl+k -> Erase from the cursor to the end of the command line

Alt+f -> Moves the cursor to the right one word at a time

Alt+b -> Moves the cursor to the left one word at a time

Ctrl+f / Right arrow -> Moves the cursor to the right one character at a time

Ctrl+b / Left arrow -> Moves the cursor to the left one character at a time

alias command

```
# alias aliascommand='command'
```

```
# unalias aliascommand
```

```
.bashrc
```

## Process commands

# ps -eH | less

# ps -u [username]

# ps -ef

# ps -o [colons]

# ps -C [sshd]

## free command

# free -h

## pgrep command

# pgrep [processName]

# pgrep -a [processName]

# pgrep -u [username]

## kill command:

# kill [PID]

# kill -[signalValue] [PID]

# pkill [processName]

# killall [processName]

## jobs command:

# jobs -l

at command:

# at [hh:mm(pm|am)] [mm/dd/yy]

Enter command to execute at the specified time.

# at -l -> list scheduled jobs

# at -c [jobID] -> check scheduled job script

# at -d [jobID] -> delete scheduled job

crontab:

# crontab -e -> it will open a file and add the cron table and command save and quit from the file

# crontab -l -> list the scheduled jobs

# crontab -r -> remove all scheduled jobs

Modifying or deleting a scheduled job # crontab -e