

Cheat sheet*

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Basic terminal shortcuts

CTRL-L	Clear the terminal.
CTRL-D	Logout.
SHIFT PgUp/PgDn	Scroll up/down.
CTRL-A	Cursor to start of line.
CTRL-E	Cursor the end of line.
CTRL-U	Delete left of the cursor.
CTRL-K	Delete right of the cursor.
CTRL-W	Delete word on the left.
CTRL-Y	Paste (after CTRL U,K or W).
TAB	Auto completion of file or command.
CTRL-R	Reverse search history.
!!	Repeat last command.
CTRL-C	Stops the current command.
CTRL-Z	Suspends the current command ¹ .

Basic terminal navigation

ls -a	List all files and folders.
ls <foldername>	List files in folder.
ls -lh	Detailed list, human readable.
ls -l *.jpg	List JPEG files only.
ls -lh <filename>	Result for file only.
cd <foldername>	Change folder ² .
cd /	Go to the root folder.
cd ..	Go up one folder ³ .
du -h	Disk usage of folders, human readable.
du -ah	Disk usage of files and folders, human readable.
du -sh	Summarise disk usage for the current folder.
pwd	Print working folder.

*Adapted from http://cli.learncodethehardway.org/bash_cheat_sheet.pdf

¹Resume with **fg** in foreground or **bg** in background

²If folder name has spaces use " "

³Tip: ../../..

Basic file manipulation

<code>cat <filename></code>	Show content of a file.
<code>more <filename></code>	Navigate through a file per page.
<code>less <filename></code>	Navigate through a file.
<code>head -<lines> <filename></code>	Show the first lines.
<code>tail -<lines> <filename></code>	Show the last lines.
<code>mkdir <foldername></code>	Create a new folder.
<code>cp <filename> <filename2></code>	Copy and rename a file.
<code>cp <filename> <foldername></code>	Copy a file to a folder.
<code>cp -R <foldername> <foldername2></code>	Copy and rename a folder.
<code>cp *.txt <foldername></code>	Copy *.txt to a folder.
<code>mv <filename> <foldername></code>	Move a file to a folder.
<code>mv <foldername> <foldername2></code>	Move a folder to a folder or rename a folder ⁴ .
<code>mv <filename> <filename2></code>	Rename a file.
<code>mv <foldername> ..</code>	Move a folder up in hierarchy.
<code>rm <filename></code>	Delete a file.
<code>rm -i <filename></code>	Ask for confirmation before removing a file.
<code>rm -f <filename></code>	Force deletion of a file.
<code>rm -r <foldername></code>	Delete a folder.
<code>touch <filename></code>	Create or update a file.
<code>ln <filename> <filename2></code>	Create a hard link ⁵ .
<code>ln -s <filename> <filename2></code>	Create a symbolic link.

Extract, sort and filter data

<code>grep <text> <filename></code>	Search for text in a file.
<code>grep -i <text> <filename></code>	Search for text in a file, not case sensitive.
<code>grep -I <text> <filename></code>	Search for text in a file, exclude binary files.
<code>grep -r <text> <foldername></code>	Search for text in all files in a folder.
<code>sort <filename></code>	Sort the content of a file.
<code>sort -o <filename> <filename2></code>	Write sorted result to a file.
<code>sort -r <filename></code>	Sort in reverse.
<code>sort -R <filename></code>	Sort randomly.
<code>sort -n <filename></code>	Sort numerically, not alphabetically.
<code>wc -l <filename></code>	Count the number of lines.
<code>wc -w <filename></code>	Count the number of words.
<code>wc -c <filename></code>	Count the number of bytes.
<code>wc -m <filename></code>	Count the number of characters.
<code>cut -c <range> <filename></code>	Select parts from each line of a file ⁶ .
<code>cut -d <delimiter> -f <field></code>	Cut based on fields ⁷ .

⁴If foldername2 exists, it moves, otherwise it renames.

⁵Can only be used on the same filesystem.

⁶`cut -c 2-5 names.txt` cuts the characters at position 2 to 5 of each line.

⁷Good for csv files.

Execute programs in the background

<code><command> &</code>	Run command in the background ⁸ .
<code>nohup <command></code>	Keep running in the background even after closing the terminal ⁹ .
<code>jobs</code>	List background jobs.
<code>fg <jobid></code>	Run a background process in the foreground ¹⁰ .
<code>bg <jobid></code>	Run a suspended process in the background.

Process management

<code>w</code>	Shows who is logged in and what they are doing.
<code>ps -u</code>	Processes from current user.
<code>top</code>	Dynamic process list ¹¹ .
<code>kill <PID></code>	Kill a process ¹² .
<code>killall <processname></code>	Kill multiple processes by name.

Flow redirection

<code><command> > <filename></code>	Redirect standard output to file.
<code><command> >> <filename></code>	Append standard output to file.
<code><command> 2> <filename></code>	Redirect standard error to file.
<code><command> 2>&1</code>	Combine standard output and standard error.
<code><command> <command2></code>	Use the output of one command as the input of another.

Archive and compress data

<code>tar -cvf <filename> <foldername></code>	Make a <code>tar</code> archive containing all files in a folder.
<code>tar -xvf <filename> <foldername></code>	Extract a <code>tar</code> archive.
<code>tar -tf <filename></code>	Show the content of a <code>tar</code> archive.
<code>tar -rvf <filename> <filename2></code>	Add a file to a <code>tar</code> archive.
<code>gzip <filename></code>	Compress a file.
<code>gunzip <filename></code>	Decompress a file.
<code>bzip2 <filename></code>	Compress a file ¹³ .
<code>bunzip2 <filename></code>	Decompress a file.
<code>zcat <filename></code>	Show content of a <code>gz</code> file.
<code>zmore <filename></code>	Navigate through a file per page.
<code>zless <filename></code>	Navigate through a file.
<code>bzcat <filename></code>	Show content of a <code>bz2</code> file.
<code>bzmore <filename></code>	Navigate through a file per page.
<code>bzless <filename></code>	Navigate through a file.

Miscellaneous

<code>man <command></code>	Show the manual of a command.
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⁸`cp <filename> . &`

⁹`nohup cp <filename> .`

¹⁰Get the job ID using `jobs`.

¹¹Press `q` to close.

¹²Get the PID using `ps`.

¹³`bzip` compresses better, but is a lot slower.