

| Command | Fuction | Informations |
|---|--|--------------------------------|
| sudo dpkg -i *.deb | install .deb file or programm | |
| ps | shows running processes | |
| ps -aux | show all running processes | |
| source .zshrc | loads file and settings from .bash_alias are load | same vor zshalias idk name |
| source .path | that inported library works | in directory with the Programm |
| cp **. | cp path-setup to execute then source | |
| du -h filename | gibt grösse von filename aus | |
| sudo find "directory" -name '*.apk' | looks for file with .apk ending | |
| sudo umount "full device name" | to unmount device | |
| mkfs.fat -F32 /dev/PARTITION | to format partition | |
| chmod +x "filename" | makes file executable | |
| upower -i 'upower -e — grep 'BAT'' | to see batteryinformations | |
| mutool draw -R 90 -o 'new name'.pdf 'file'.pdf | to rotate clockwise 90 degree | |
| wc -l "file" | counts lines in file | |
| ls -s | shows size of files | |
| pandoc input.md -o output.pdf | compiles Markdown files to pdf | |
| apt-cache pkgnames "beginning of package name" | to see all available packages, in "" is optionel and shows just the packages starting with | |
| pushd directory | go in directory | |
| popd | when pushd made first us can go back where u were befor | |
| awk | usefull for for outputs | |
| xargs | takes output and puts behind the programm folwing | |
| bluetoothctl | to connect to bluetooth devices | |
| file "image" | shows some metadata like size and format | |
| find . -type f -name "* *" — while read file; do mv "\$file" \$file// /_;; done | finds files with space and replaces it with | |
| perm directory | shows permition from directory | |
| sudo update-alternatives --config python3 | to update python3 verion | |
| zip -r newfile.zip folder/ | zips folder in file | |
| jobs | shows process in backgrounds | |
| kill %"number" | kills process with this number | |
| sudo update-alternatives --displa java | shows optional java versions and current version | |
| java -version | shows current java version | |
| javac -version | to see version of java compiler | |
| sudo update-alternatives --config java | to change the java version | |
| sudo update-alternatives --config javac | to change the version of the java compiler | |
| sudo apt install openjdk-17-jre | -jdk for java compiler, installs version 17 of java/javac | |
| file | shows info about a file | |
| lsusb | list usb devices | |

| | | |
|--|---|--------------------------------|
| mutool draw -R 90 -o out.pdf Tenses.pdf | to rotate clockwise by 90 degree | |
| ln -fs 'any dircetory' 'direcatory name in pwd' | creates directory linkt the new directory like a portal | |
| ł | to redirect output for example in a file | overrides existing file |
| łł | appends output into new director/-file | doesn't override existing file |
| tmux | starts a tmux session | |
| tmux ls | lists tmux sessions | |
| ctrl + b , D | detaches tmux session | |
| ctrl + b , p/n | go to previous/next window | |
| ctrl + b, 1 0..0 | switch/select window by number | |
| tmux list-sessions | shows active lessions | |
| ctrl + b, s | "" | |
| zip -r zipname.zip directory1 directory2 file1 ... | to zip files and directory with -r | |
| f2 or esc to enter BIOS/UEFI -ł boot menu | to boot from a external device, than it will also schow up in grub | |
| usb-device | list device conectet | |
| ls /etc/apt/sources.list.d | list of repositorys installed via add-apt-repository | |
| sudo rm /etc/apt/sources.list.d/name-from-above | to delet a repository without the exact ppa name | |
| apt-key list | list keys for ppas | |
| sudo do-release-upgrade | updates software to newest Ubuntu-version | |
| sudo do-release-upgrade -c | to see what versions are available | |
| apt show "programm" | shows info about the programm | |
| gpg -d "file" | to dencrypt file | |
| find . -type f -name '*pattern*' | will find all files in . folder with name pattern, u can change pattern to any patter | |
| find . -type f -name '*pattern*' -exec mv {} . | moves every founde file to . or whereever i want it | |

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| pdfposter -mA2 example.pdf example-A2-pdfposter.pdf | makes pdf in A2 foramt | |
| pdftinfo | schows info of pdf | |

| | | |
|--|---|--|
| code | meaning | information |
| mount "device name" "mount point" | mounts device | mount points for example: /mnt/usedrive /media/usb /media/USB |
| fdisk -l | list all the devices and also usb discs | |
| bluetoothctl scan on | scans for devices | can also just first bluetoothctl an then do alle the commands |
| bluetoothctl discoverable on | make own device discoverable | |
| bluetoothctl pair FC:69:47:7C:9D:A3 | pair with device, thats an example name, if already paired once this is not necesairy | |
| bluetoothctl connect FC:69:47:7C:9D:A3 | to connect to device | |
| bluetoothctl paired-devices | shows paired devices | more commands on https://www.makeuseof.com/manage-bluetooth-linux-with-bluet |
| pandoc DOCUMENT.md -o DOCUMENT.pdf | compiles Markdowndocument to pdf | |
| idevicepair pair | pairs iphone | |
| ifuse /medie/iphone | mounts iphone to that path | |
| ifuse -u /medie/iphone | unmount iphone | |
| convert -resize 50% picture.jpg new-picture.jpg | picture will downsized to 50% | |
| tar -xf file.tar.gz | unzips tar or gz files | |
| xclip -o <i>i</i> /path/to/file.txt | to put something from clipboard to a file | |
| sudo snap remove package_name | removes snap package | |
| sudo systemctl status spotifyd.service | looks if spotifyd.service programm is active | |
| spotifyd | start spotifyd api | after that spt will work |
| Ctrl + Z | suspends process | |
| jobs | shows what processes are in the background | |
| fg %number | brings process in foreground | number is the number shown when jobs executed |
| jupyter nbconvert --to pdf saturn-clou1.ipynb | converts jupyter files to pdf | |
| shred -u | removes not only pointer (rm) to data, it also removes the actual data | |
| fzf | a programm to find paths of files | |
| %lsblk -p -- grep "disk -- part" | to find devices that are mountd an can be | |
| pdfseparate -f 1 -l 5 input.pdf output-page%d.pdf | seperates pdf, 1 and 5 stands for the start and end page | |
| pdftk inputfile.pdf cat 1-5 outputnameoutputfile.pdf | 1-5 range of pages you want from original pdf, cut pdf | |
| top | shows ongion processes with Memory ussage and others | |
| free -h | show ussage of RAM with buffer, swap und caches ussage | |
| dd | copy cut file | in ranger |
| pp | paste what was cutted | in ranger |
| sudo nmcli dev wifi list | shows list of accessable wifis | |
| sudo nmcli --ask dev wifi connect network-ssid | connect to wifi with name network-ssid and ask for passwort | https://www.makeuseof.com/connect-to-wifi-with-nmcli/ |

TMUX

: means in Commandmode of tmux

| | | |
|-----------------------------|---|-----------------------------|
| ctrl + space | regular prefix for everything in tmux | |
| tmux | written in terminal, opens a new tmux session with name 0 | |
| tmux new-session -s name | opens new session with "name" | |
| tmux ls | list active tmux sessions on server | |
| tmux attach-session -t name | attaches session with set name | |
| prefix + c | opens new window in session | |
| prefix + d | detaches session | brings it in the background |
| prefix + shift + % | splits screen vertically with new pane to the right | |
| prefix + shift + " | " " horrizontaly " " ont the buttom | |
| prefix + x | closes panesession | |
| prefix + q | shows nuber for pane | |
| prefix + q + number of pane | changes to set pane | |
| prefix + number | changes to window with set number | |
| prefix + z | overlases your pane ocver the others | |
| prefix + s | shows open terminals and can change there | |
| prefix + : | enter commandline for tmux | |
| : new | opens new Session | |
| : new -s "name" | " " with name as name of session | |
| prefix + \$ | rename the session | |

Bash "Syntax"

| code | meaning | information |
|----------------------|--|---|
| \$"something" | with \$ u access something | \$1 gets first input |
| ("Function") | inside () something like find or pwd gos | |
| "Command" | Command stands for like 1##*/ | in compileInfo it cuts the filename |
| \$parameter#pattern | shortest match from pattern in parameter from beginning is deleted | |
| \$parameter##pattern | longest match from pattern in parameter from beginning is deleted | \$1##*/ deletes everything from input bevor the last / |
| \$parameter%pattern | like # just from end | |
| \$parameter%%pattern | like ## just from the end | |
| " text " | everything in "" will be like String and no commands except \$,',backslash | echo "pdflatex textdummit.tex" output pdflatex textdummi.tex |
| ' command/text ' | similar to "" but can use variables | echo "my variable value is '\$variable'" |
| variable=5 | declaring variable as integer 5 | works like in python |
| == != + - * / % | operator like in java but has also other use | |

```

1  if [condition]
2  then
3      statement
4  fi
5
6  if [condition 1]
7  then
8      Statement 1
9  elif [condition 2]
10 then
11     Statement 2
12 else
13     Statement 3
14 fi

```

* ~/schulmaterial/efi/EigeneProjekte/inputoutputflanagan
 ** ~/schulmaterial/efi/Eigene_Projekte/inputOutputFlanagan/path-setup

for more information of syntax

https://www.gnu.org/software/bash/manual/bash.html#index-insert_002dcomment-_0028M_002d_0023_0029

<https://www.tutorialspoint.com/unix/unix-basic-operators.htm>

Samsung Electronics Co., Ltd GT-I9100 Phone [Galaxy S II] (Download mode)

Problems with PUBLIC-keys on ppa, -i just download ppa again like "sudo add-apt-repository ppa:neovim-ppa/stable"

after "apt update" u see the repositorys and if they have launchpad in it u can short the ppas easy to there names.

like "http://ppa.launchpad.net/neovim-ppa/stable/ubuntu" - "ppa:neovim-ppa/stable"