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 filname aus	
sudo find "directory" -name '*.apk'	looks for file with .apk ending	
sudo umount "full device name"	to unmount device	devicename = /dev/sda fro example
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 degre	
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 awailable 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 backgrouns	
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	
inkscape -p baeldung_logo.png -o output_baeldung.svg	convert png to svg	

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	
¿	to redirect output for example in a file	overrides existing file
¿¿	appends output into new director/-file	doesn't override existing file
tmux	starts a tmux session	
tmux ls	lists tmux sessions	
crtl + b , D	detaches tmux session	
crtl + b , p/n	go to previous/next window	
crtl + b, 1 0..0	switch/select window by number	
tmux list-sessions	shows active lessions	
crtl + b, s	""	
zip -r zipname.zip directory1 directory2 file1 ...	to zip files and directory with -r	
f2 or esc to enter BIOS/UEFI -¿ 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	
pdfposter -mA2 example.pdf example-A2-pdfposter.pdf	makes pdf in A2 foramt	
pdfinfo	schows info of pdf	
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 devicse 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`
wc	programm that can count lines,	

code	meaning	information
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 ¿ /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 output nameoutputfile.pdf	1-5 range of pages you want from original pdf, cut pdf	
top	shows ongion processes with Memory ussage and others	
bashtop	show ongion process but better then top	
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/
sensors	shows heat of cpu	
ffmpeg –i example.mp4 –c:a copy –c:v copy –map_metadata -1 example_modified.mp4 ¿& /dev/null	removes metadata from video	have not used like this
exiftool -all= file	removes all metadat from file	
exiftool file	shows metadat	
psql -h [HOSTNAME] -p [PORT] -U [USERNAME] -W -d [DATABASE-NAME]	to conecct to database by psql	
newgrp docker	to log in into groupe (permission) docker where i can execute docker without sudo	

act	runs github actions localy with docker	need .github/workflows/file.yml
find /path/to/directory -type f -size +1G	finds files bigger the 1GB in path	
ollama run llama3.2	runs ollama AI	
docker run -it ubuntu bash	downloads newest ubuntu image, runs it in bash	
veracrypt –mount ¡¡fileToMount¿¿	mounts file to path	recommended /media/liquid/vera
veracrypt -d	umounts file	
uname -a	shows all the kernel infos	
ip addr show	shows ip adress of all devices	can add specific name of device
du -sh directory	shows size of directory	
nslookup ¡¡servername¿¿	shows ip adress of servername	
sudo ifconfig enx00e04cebfbd5 192.168.0.4 netmask 255.255.255.0	set ip adress for (sub)network	enx00e04cebfbd5 = networkdevice 192.168.0.4 = new ip adress 255.255.255.0 = mask
pdfjam –outfile out.pdf –paper a4paper in.pdf	makes pdf to a4	
lazygit	opens a programming managing git/github	
vproject	opens txt files with project ideas to customize my laptop	
qrencode -s 6 -l H -o "wifi.png" "WIFI:T:WPA;S:¡SSID¿;P:¡PSWD¿;;"	wlanlogin to qrcode, did not work with me	
z tor and ./star...	opens tor in tor-browser	
idevicebackup2 -i encryption on	start encryption mode for backup	
idevicebackup2 backup –full /path/-to/backup/	make backup of iphone	

TMUX		
prefix = CRTL + a	this is the current prefix	
prefix = CRTL + a	this is the current prefix	
crtl + 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 backround
prefix + shift + %	splits screen verticaly 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	
prefix + ;	Toggle last active pane, goes to last active pane	
Alt + H or L	moves between windows	
prefix + ä	loads configs new	
prefix + Ctrl + s	safes tmux sessions	
prefix + Ctrl + r	restore safe sessions	

:means in Commandmode of tmux

RANGER		
:open_with programm	opens file I hover with programm I want it to open the file	
m ¡key¿	marks directory as bookmark, key can be anything	
' ¡key¿	gets u to bookmark	

ARCH		
startx	starts xininit which starts awsome	
iwd	programm to cinecct to wifi	

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, -¿ 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"