

# Bash Commands Cheat Sheet

## 1. Navigation

- `pwd` – print working directory
- `ls` – list files
- `cd <dir>` – go to directory with the given name
- `mkdir <dir name>` – create a directory with the given name
- `rmdir <dir name>` – remove the empty directory
- `rmdir -r <dir name>` – remove (recursively) the non empty directory

## 2. Operations with files

- `cp <source path> <destination path>` – copy
- `mv old new` – move/rename
- `rm file` – remove
- `cat file` – print all content
- `head -n 10 file` – view first 10 lines
- `tail -n 10 file` – view last 10 lines

## 4. Operations with file content

- `wc -l file` – line count
- `uniq` – remove duplicates
- Search by file content:  
`grep "text" file` (-i for case sensitive)  
`grep -r "pat"` (-r for recursive search in all directories)
- Search by file name:  
`find -name "*.txt"` - find all txt files

`find -name "*fil*" - find all files that have "fil" in their name`

## 5. Permissions

- `chmod +x script.sh` – make executable
- `chmod u=rwx,g=rx,o=r myfile` - user can r+w+x, group members can r+x, others can only r
- `whoami` – check the current user
- `df -h` – disk usage
- `du -sh dir` – directory size

## 6. Processes

- `ps aux` – list processes
- `top` – monitor CPU/memory
- `kill <pid>` – stop process

## 8. Archiving

- Compress: `tar -czf arc.tar.gz <dir name>/`
- Extract: `tar -xzf arc.tar.gz`

## 9. Bash commands operations

- Show commands: `history`
- Re-run last command: `!!`
- Write history to file: `history -w /history.txt`
- Clear screen: `clear`