## Shell: Advanced

#### Find things

1. find . -name haiku\*

#### Look at files

#### The haiku

- 1. cat ./folders/subfolder2/subsubfolder6/haiku.txt
- 2. find . -name "haiku\*" -exec cat  $\{\}$ ;

#### Our yellow.md

- 1. vscode colors/yellow.md
- 2. cat
- 3. head
- 4. tail

## **Pipes**

#### How to get only the first real paragraph?

#### Combine them through pipes

- 1. head -n 11 colors/yellow.mp3
- 2. head -n 11 colors/yellow.mp3 | tail -n 7
- 3. head -n 11 colors/yellow.mp3 | tail -n 7 > colors/yellow-paragraph.md

#### How to sort and filter lines in files?

Note: only deletes sequential lines

- 1. cat glaciers.txt
- 2. uniq glaciers.txt
- 3. sort glaciers.txt
- 4. uniq glaciers.txt | sort
- 5. sort glaciers.txt | uniq > glaciers-unique.txt

# How to count lines, words and characters

- 1. wc glaciers.txt
- 2. uniq glaciers.txt | wc
- 3. sort glaciers.txt | uniq | wc

## pandoc

- 1. pandoc animals/rhino.md -o animals/rhino.pdf
- 2. pandoc animals/rhino.md -o animals/rhino.html

## How to automate things (little shell scripts)

- 1. code sort-uniq.sh
- 2. sort "\$1.txt" | uniq > "\$1-su.txt"

#### two inputs verson

sort "\$1" | uniq > "\$2" && wc "\$1" && wc "\$2"

#### What have we learned?

- pandoc input -o output: Easily convert markdown into pdf or html (and many more)
- bash shell-script arguments: Execute a shell-script
- \$N: Placeholder variable for  $N^{th}$  argument

#### Exercise: Small automatisation

- 1. Go into the animals folder
- 2. Open a shell-script called make-pdf.sh with VS Code
- 3. We want to automate the pandoc pdf creation from before
- The script takes one argument, the input filename without the fileending, e.g. rhino
- from rhino.md it creates rhino.pdf
- 4. Go into the animals folder and try what happens if you type bash make-pdf.sh rhino
- 5. delete rhino.pdf
- 6. What happens if you type bash make-pdf.sh {rhino, lion}?
- 7. Do have an idea what the problem could be? Discuss with your partner.

# Rest see solutions