

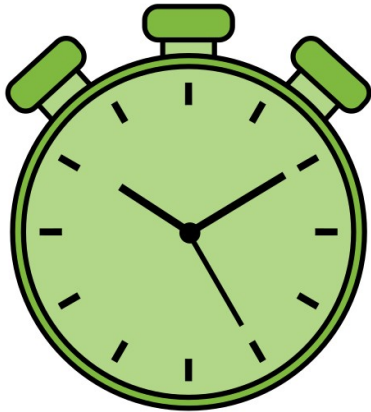
Advent of Code

Dr. Kristian Rother



©2022 Dr. Kristian Rother
*Distributed under the conditions of the
Creative Commons Attribution Share-alike License 4.0*

Approach #1: Contest



| | |
|------|--|
| 5:50 | wake up |
| 5:55 | coffee |
| 5:56 | copy skeleton code from your template |
| 5:59 | hit refresh button in browser, repeat |
| 6:00 | GO! |
| +X | Yay! (X = 10 minutes to 4 days) |



**Doing this for 25 days
is physically & mentally
exhausting!**

Approach #1: Contest

| | |
|------|--|
| 5:50 | wake up |
| 5:55 | coffee |
| 5:56 | copy skeleton code from your template |
| 5:59 | hit refresh button in browser, repeat |
| 6:00 | GO! |
| +X | Yay! (X = 10 minutes to 4 days) |

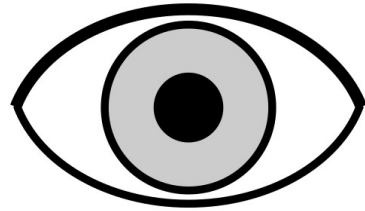


Approach #2: Sustainable

1. do not rush
2. test your code
3. identify data structures
4. team up

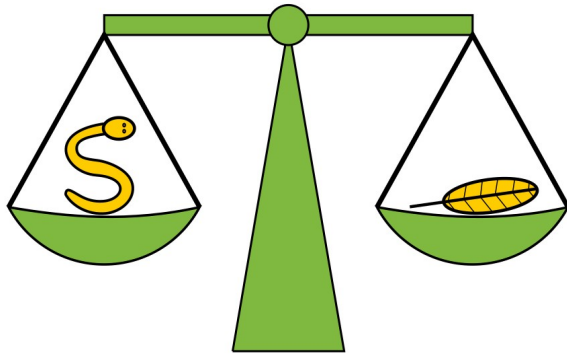
.. make sure you learn something

Do not rush



Read the requirements very carefully.

<https://adventofcode.com/2021/day/14>

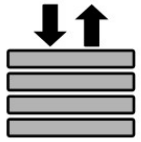


Test your code

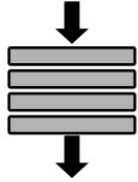
- Problem description contains data for Unit Tests
- add more examples with test parametrization
- easy problem: test toplevel function only
- difficult problem: test decompositions, too
- TDD is a great idea

(also see: Uncle Bob, Clean Code Talks, Youtube)

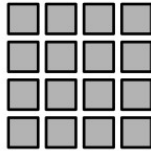
Identify data structures



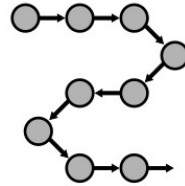
stack



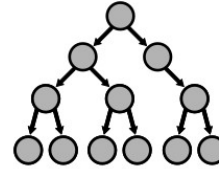
queue



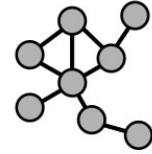
array



chained list



tree

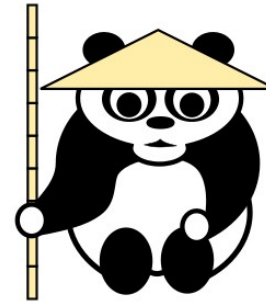
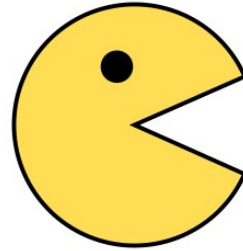
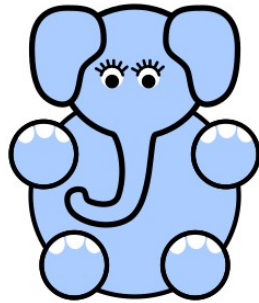
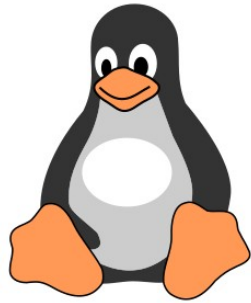


graph

abstraction of data allows you to estimate complexity,
choose an algorithm and, only after that, decide on the implementation.

(also see: Robert Sedgewick, Algorithms, Coursera)

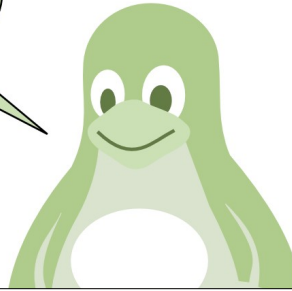
Team Up!



Things that worked:

Pair programming, daily calls, exchange ideas, review code together, having juniors seniors and web devs around

***Thank
You***



https://github.com/krother/advent_of_code

www.academis.eu