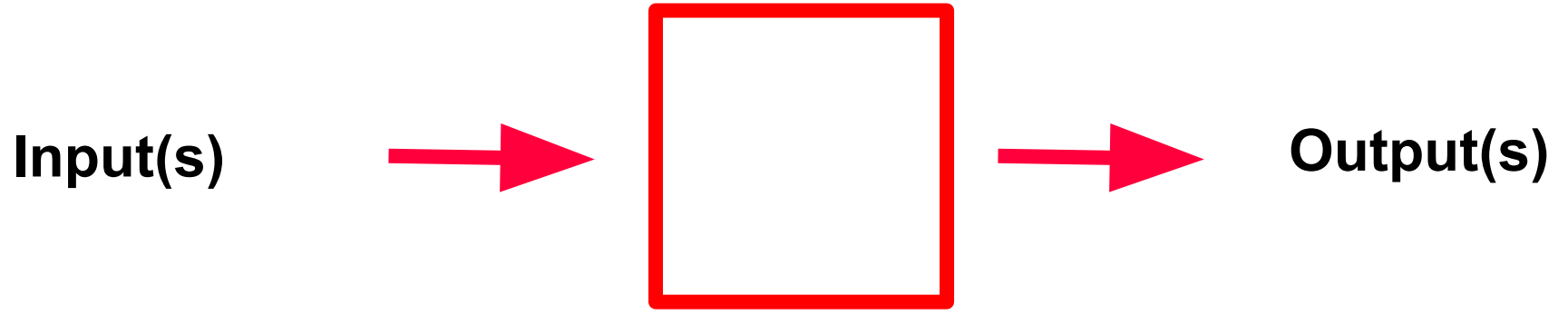




Introduction to the Art of Programming

Module 1: Computational Thinking

CAS Digital Masterclass, June 26th 2021
Jürg Stuker, <https://et.academy>





With the Help of Cubetto

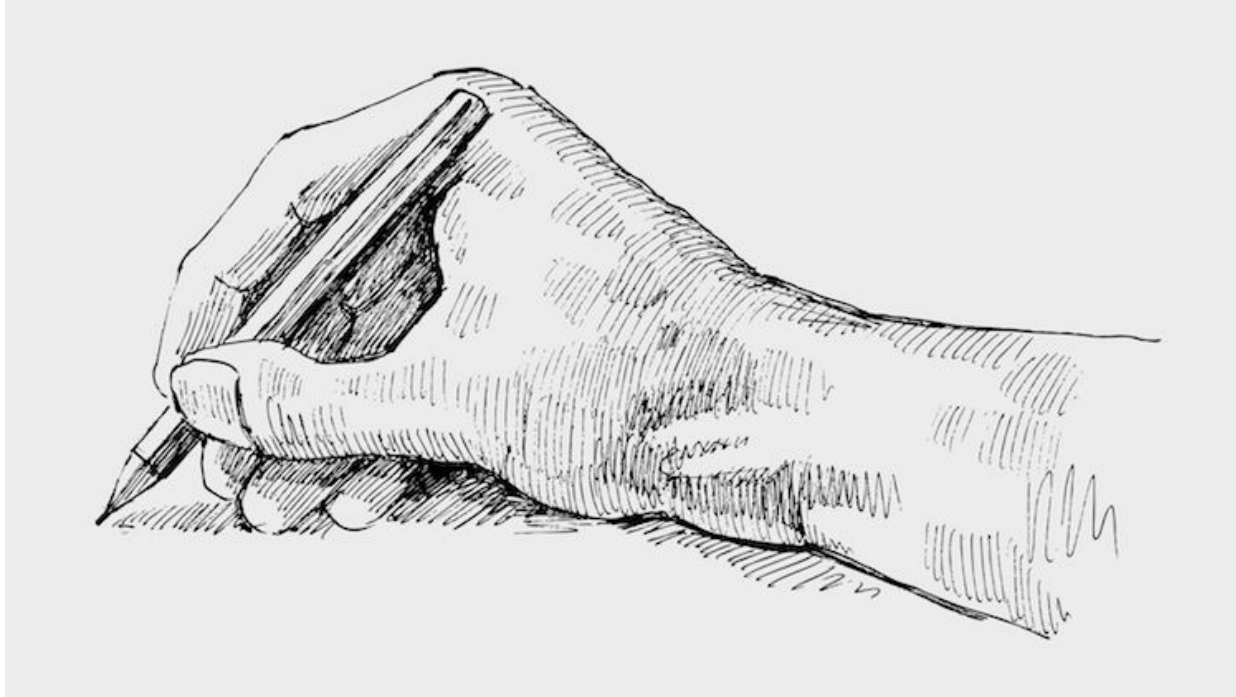


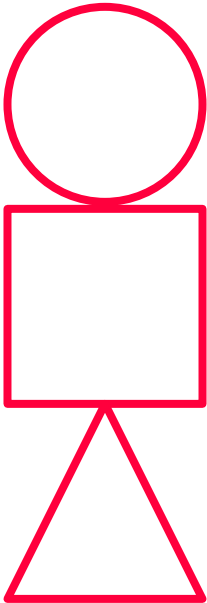
Algorithmic Thinking



Program your teacher to make a Jam Sandwich (Sandwich Bot) Junior Computer Science

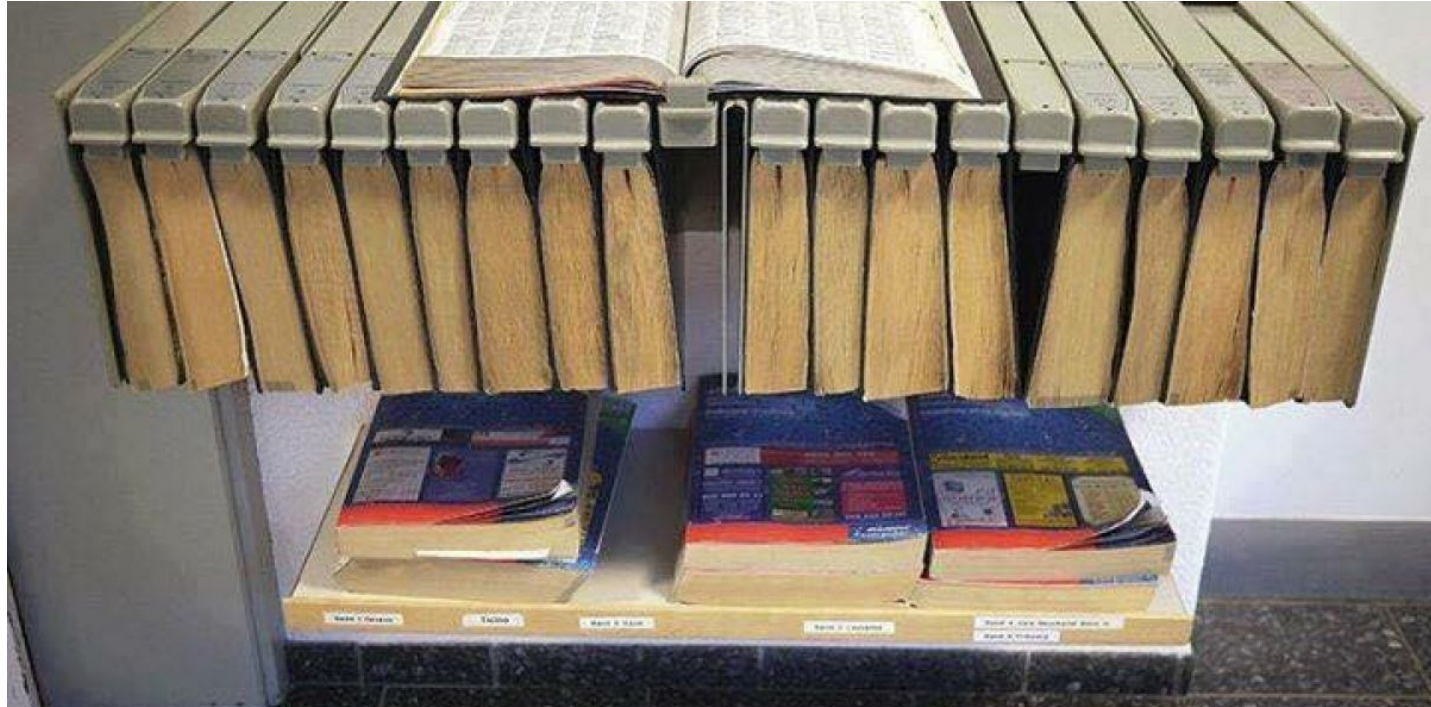
Task





“Computational thinking is the thought processes involved in modeling a situation and specifying the ways an information-processing agent can effectively operate within it to reach an externally specified (set of) goal(s).”

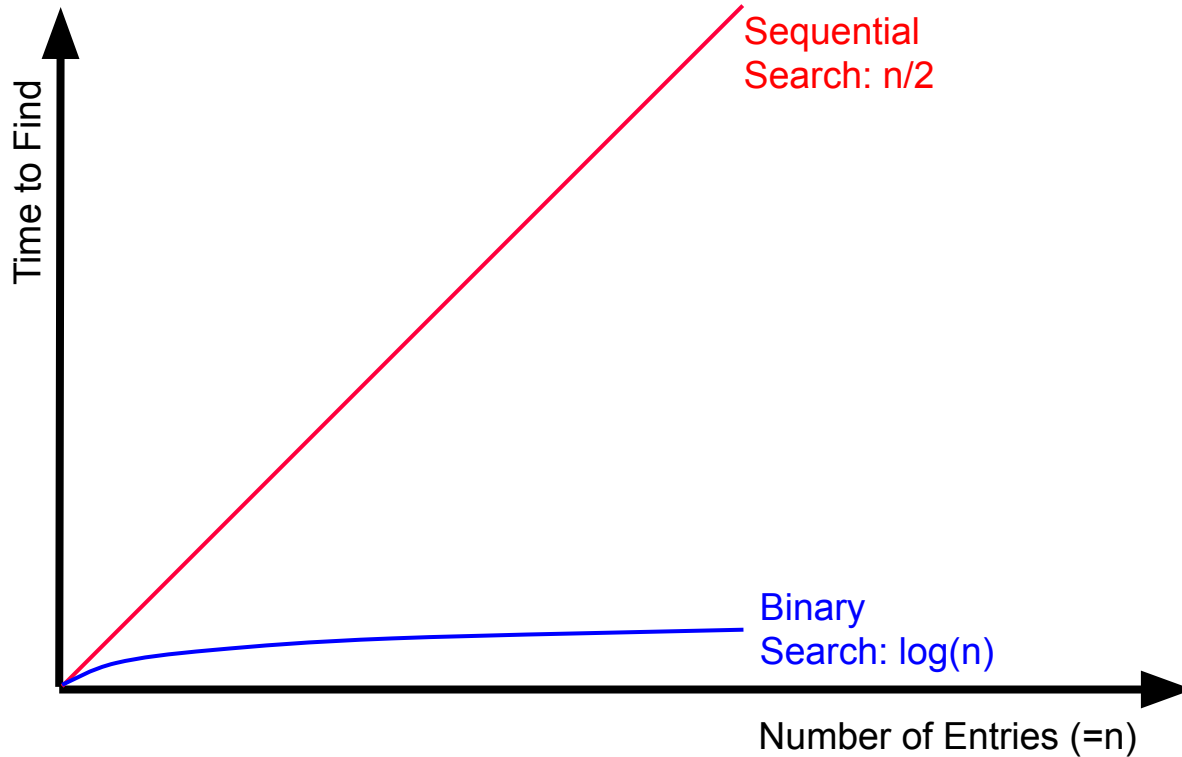
Search in the Phone Book



Sequential Search

Binary Search

Cost for Phone Book Search?



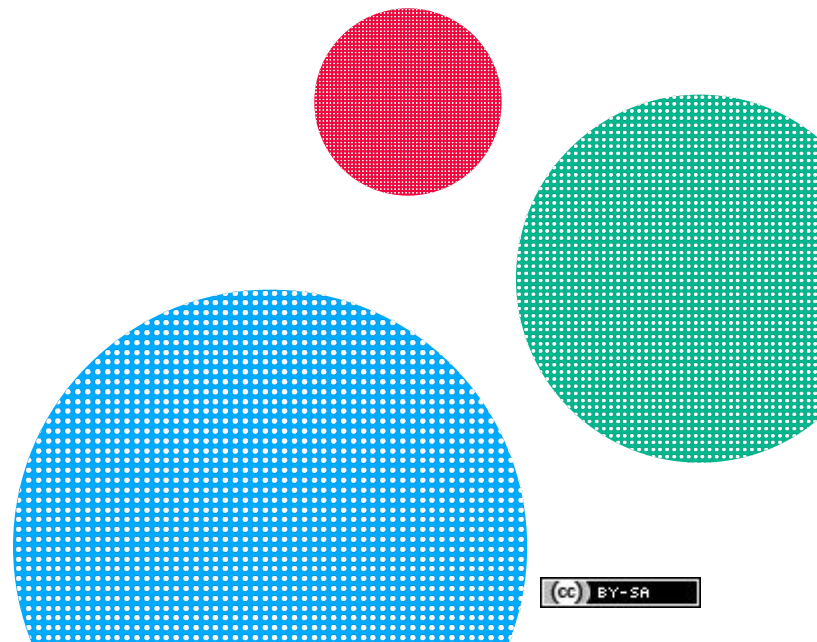
Wrap up Module 1

“How to communicate to an (information-processing) agent to efficiently to the job”

- no only program execution
- ambiguity

Thinking in algorithms

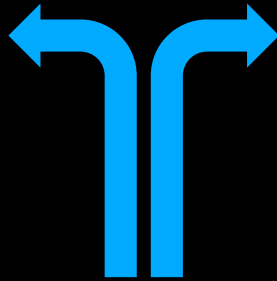
- difference in complexity



Write your first program - using Scratch.



“Information-processing agent”



“Specifying the way”



“Externally specified set of goal(s)”



 **Executive**

 **Tech**

 **Academy**

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