



A Computational Approach



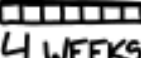

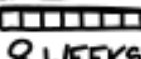


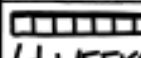

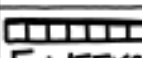




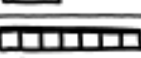


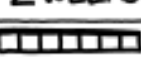

Why take an automated or computational approach?

Main Lessons

- Borrow, borrow, and borrow again.
- The correct language to learn is the one that works in your local context.
- Consider the role of programming in professional development.
- Knowing (even a little) code helps.
- Automate to make time to do something else!

Why automate?

HOW LONG CAN YOU WORK ON MAKING A ROUTINE TASK MORE
EFFICIENT BEFORE YOU'RE SPENDING MORE TIME THAN YOU SAVE?
(ACROSS FIVE YEARS)

		HOW OFTEN YOU DO THE TASK					
		50/DAY	5/DAY	DAILY	WEEKLY	MONTHLY	YEARLY
HOW MUCH TIME YOU SHAVE OFF	1 SECOND	 DAY	2 HOURS	30 MINUTES	4 MINUTES	1 MINUTE	5 SECONDS
	5 SECONDS	 DAYS	12 HOURS	2 HOURS	21 MINUTES	5 MINUTES	25 SECONDS
	30 SECONDS	 4 WEEKS	 DAYS	12 HOURS	2 HOURS	30 MINUTES	2 MINUTES
	1 MINUTE	 8 WEEKS	 DAYS	 DAY	4 HOURS	1 HOUR	5 MINUTES
	5 MINUTES	9 MONTHS	 4 WEEKS	 DAYS	21 HOURS	5 HOURS	25 MINUTES
	30 MINUTES		6 MONTHS	 5 WEEKS	 DAYS	 DAY	2 HOURS
	1 HOUR		10 MONTHS	2 MONTHS	 DAYS	 DAYS	5 HOURS
	6 HOURS				2 MONTHS	 2 WEEKS	 DAY
	 DAY					 8 WEEKS	 DAYS

'Is it worth the time?' by Randall Munroe available at <https://xkcd.com/1205/> under a Creative Commons Attribution-NonCommercial 2.5 License.

Exercise: Is there something you would like to automate in your work?