Drop-in / Q&A

We asked learners to vote on the following topics for a mini-lesson for the last session before the show-and-tell session:

1. working with dates and times in R
2. working with strings and factors in R
3. packaging complicated workflows (analyses that include multiple scripts, more than just R code, etc.)
4. I would like the entire time for a question/answer session

They overwhelmingly chose #3

Targets

- Show slides from part 1 of previous targets workshop
- Demo repo (`targets` version on a branch): https://github.com/cct-datascience/targets-demo/tree/with-targets
  - Explore files
    - `R/`
    - `_targets.R`
  - Demonstrate `tar_visnetwork()`, `tar_make()`, `tar_read()`
    - Investigate `_targets/`
  - Demonstrating invalidating a target by adding `species` to the model fit by `lm()` in one of the functions in `fit_models.R`.
    - re-run `tar_visnetwork()` and `tar_make()`
- Explore a medium complexity `targets` project on GitHub: https://github.com/ecohealthalliance/mpx-diagnosis
  - *maybe* try to reproduce it
- Mention that `targets` can be configured to work on UA HPC to run individual targets as SLURM jobs or multiple cores with Open on Demand.
  - Open on Demand example: https://github.com/cct-datascience/targets-uahpc
- Direct people to `targets` manual and discussions

Executing R code in the shell / shell code in R

- Example of running R and Python scripts from bash:

```
Rscript 01-save_penguins.R
bash 02-rename_penguins.sh
python 03-print_penguins.py
```

- Example of multi-lingual quarto doc