Chapter 3:

- Propositions, booleans, logical equivalence. §3.1 (last week Friday)
- Boolean sequences §3.2 (**Today**)
- Conditional propositions and arguments. §3.3 (Wednesday)
- Predicates and quantification. §3.(4 & 5) (Friday)
- (Begin proofs next week)

Today:

- The idea of sets as Boolean sequences
- Boolean-list indexing of arrays
- Boolean-list indexing as querying

This section unites the big ideas of the first three chapters: Sets can be represented as sequences of propositional values. On one hand, these connections illuminate the use of discrete mathematical structures in capturing real-world phenomena. Moreover, they inform a programming idiom for querying data.

0 Species: 0–Adelie, 1–Gentoo
1 Island: 0–Torgersen, 1–Dream, 2–Biscoe
2 Culmen length
3 Culmen depth
4 Flipper length
5 Body mass
6 Sex: 0–Male, 1–Female

For next time:

Do exercises 3.2.(1,3,5,7,9,11,13,15,17)—in other words, the odds.

The exercises less than 8 are type-analysis problems to be done on paper. The exercises greater than 8 are programming problems to be done in the accompanying notebook.

Read Section 3.3