Hoon 101

Week 1

Reading

- Booting a fakezod
- Intro to Dojo
- Nouns

Walkthrough

- List of Numbers

Assignment
Build a naked generator that takes an atom from the user and returns that atom with a different aura. First mention what a naked generator is here, with a link to the docs.

Week 2

Reading

- Hoon Syntax

Walkthrough

- Conditionals

Assignment
Build a naked generator that takes a noun and checks if that noun is a cell or an atom. If that input noun is an atom, check if it's even or odd. The output should be of the tape type. A tape is a string.

Week 3

Reading

- Gates.
- Lists.

Walkthrough

- Recursion
- Fibonacci

Assignment

1. Comment each line of code from the tail-call optimized recursion example to explain what the code is doing.
2. Build a naked generator that accepts a list as its argument, and returns the third element of that list. Do not use any standard-library functions. Lists are kinds of nouns that are written as [1 2 3 4 ~].

Week 4

Reading

- The Subject and its Legs

Walkthrough

- Ackermann function

Assignment

If we list all the natural numbers below 10 that are multiples of 3 or 5, we get 3, 5, 6 and 9. The sum of these multiples is 23.

Find the sum of all the multiples of 3 or 5 below 1000.

Week 5

Reading

- Arms and Cores

Walkthrough

- Caesar

Assignment

1. Here is a generator that checks for counterexamples of the unproven Goldbach conjecture, up to a certain number. Adds comments to each line to explain what the code is doing.
2. Here is the skeleton of a naked generator. Complete it so that it's that takes a tape as an argument and produces a tape as it's output which is a translation of the input tape into Morse Code.

Week 6

Reading

- Doors

- Generators

Walkthrough

- Bank account state machine

Assignment

Write a %say generator that takes two arguments x and y and produces a list of x lists of y cards from a standard 52 card deck