ROM #1 – Table of Contents

- Meadow Map (MM): a set of flowers and a set of beelines with two flowers
- Loner: a flower with only one incident beeline
- Flight: a sequence of adjacent flowers in which no beeline is traversed twice
- Path: a flight through which no flower is passed twice
- Friend Circle (FC): a path that starts and ends at the same flower
- Charisma: the number of incident beelines to a flower
- Charismatic: a MM in which every flower has charisma at least 2
- (Socially) Isolated: a flower that has no incident beelines
- Narcissistic: a flower with at least one beeline connecting to itself
- Connected: a MM in which there exists a path between every two flowers
- Drought: a MM with no friend circles
- Communist: a MM in which all flowers have the same charisma
- k-connected: a MM in which removing k beelines keeps the MM connected
- Beesy: a MM in which all pairs of flowers have a beeline between them
- Besties: two flowers that have at least two distinct beelines between them
- Simple: a MM without any besties or narcissistic flowers
- Sub-MM: a subset of flowers and beelines in a MM

Finally, we came across some important types of functions: injections, surjections, and bijections. We defined a function to be well-defined if every input returns a unique output.

In Root 4, we found all the languages spoken by members of the class, students and instructors included.

In addition, we talked more about meadow maps, particularly droughts, and proved some of their unique properties. For example, a drought with n flowers has $n-1$ beelines.

We also made a lot more progress with fletchings, such as observing what kind(s) of flats are parameterized by linear functions mapping flockhs to flockhs.

In Root 5, we were introduced to the topic of spanning droughts, inspired by the events of the previous day's Daily Gather.

We discussed whether every connected MM had a spanning drought and whether we could find an algorithm that reduced any MM into a spanning drought. After the class split into groups and came up with three promising ideas, another question was proposed: if we assign "ener-bees" to each beeline, is there an algorithm for finding a spanning drought that has the smallest "ener-bee" sum?

After this, we listened to a story about the Hilbert hotel, which housed an infinite number of rooms. When new guests moved in, the residents were required to move to different rooms to accommodate for the newcomers. This story led into a discussion about bijections between infinite sets and different "sizes" of infinity.