DATA C88C
Spring 2025

Getting Started
Discussion 0: January 22, 2025

Welcome to DATA C88C! This first discussion will just include icebreakers to get to know each other, but future discussions will be an opportunity for you to practice course content.

Part 0: Introductions [5 minutes]

Introduce yourself to the class! Tell us your:

1. Name
2. Year
3. Major
4. Where you're from
5. Something you're passionate about or a hobby of yours

Part 1: Counting [10 minutes]

Let's try to count from 1 to 30 as a class. Here are the rules:

1. Each person will count off no more than once.
2. The order in which people count off must be random (e.g. you can't just go in order by seating positions).
3. If more than one person says a number at the same time, you have to restart at 1. For example, if Alice says "twenty" and Bob says "twenty" at the same time, you have to start over!
4. If you do not go in strictly increasing and consecutive order, you have to restart at 1. For example, if Alice says "one," Bob says "two", and then Charlie says "four," you have to restart at 1.

How quickly can you get to 30 without breaking the rules?

Part 2: Light switches [10 minutes]

Suppose you have 10 light bulbs, 10 light switches that correspond to each light bulb, and 10 people.

The light bulbs all begin turned off. Person 1 flips the switch on every light bulb. Person 2 flips the switch on every other light bulb. Person 3 flips the switch on every 3rd light bulb. This pattern continues until Person 10. Which light bulbs will be left on by the end?

Challenge: What light bulbs would be left on by the end if we extended the pattern to 100 light bulbs and 100 people?

Answer: Puzzling StackExchange

By the end of this course, you will be able to write a Python program that can verify the answer to this puzzle automatically!