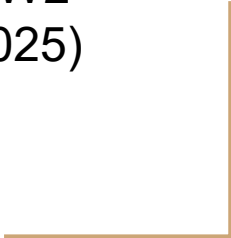




Programming, Problem Solving, and Algorithms

CPSC 203, 2024 W2
(January – April 2025)
Ian M. Mitchell
Lecture 07



Announcements

- Course web page: <https://ubc-cs.github.io/cpsc203/>
 - Weeks 1 – 3 are updated, week 4 is underway.
- Starting this week: Pre-lecture videos
 - Webpage has checklist to track your own progress
- Assessments:
 - Lab 3 (data classes) underway
 - POTW 3 extended to next Sunday
 - POTW 4 due next Sunday
 - Test 2 this week (practice test 2 is available)
- Tech stack: If at first you don't succeed... ask for help.

CPSC 203 weekly schedule

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Lectures	videos	12:30 – 14:00	videos	12:30 – 14:00			
Labs	Noon – 13:30 16:00 – 17:00	14:30 – 17:00 17:00 – 20:00		Due @noon	Look over the lab		
POTW	Five problems, five days						Due @noon
Tests in CBTF (~bi-weekly)	Last day to take the test			Slots available to take the test			CBTF closed

- The three projects are multi-week assessments with their own schedules

Today's Plan...

1. Announcements!
2. Knitting data classes
3. Pandas?

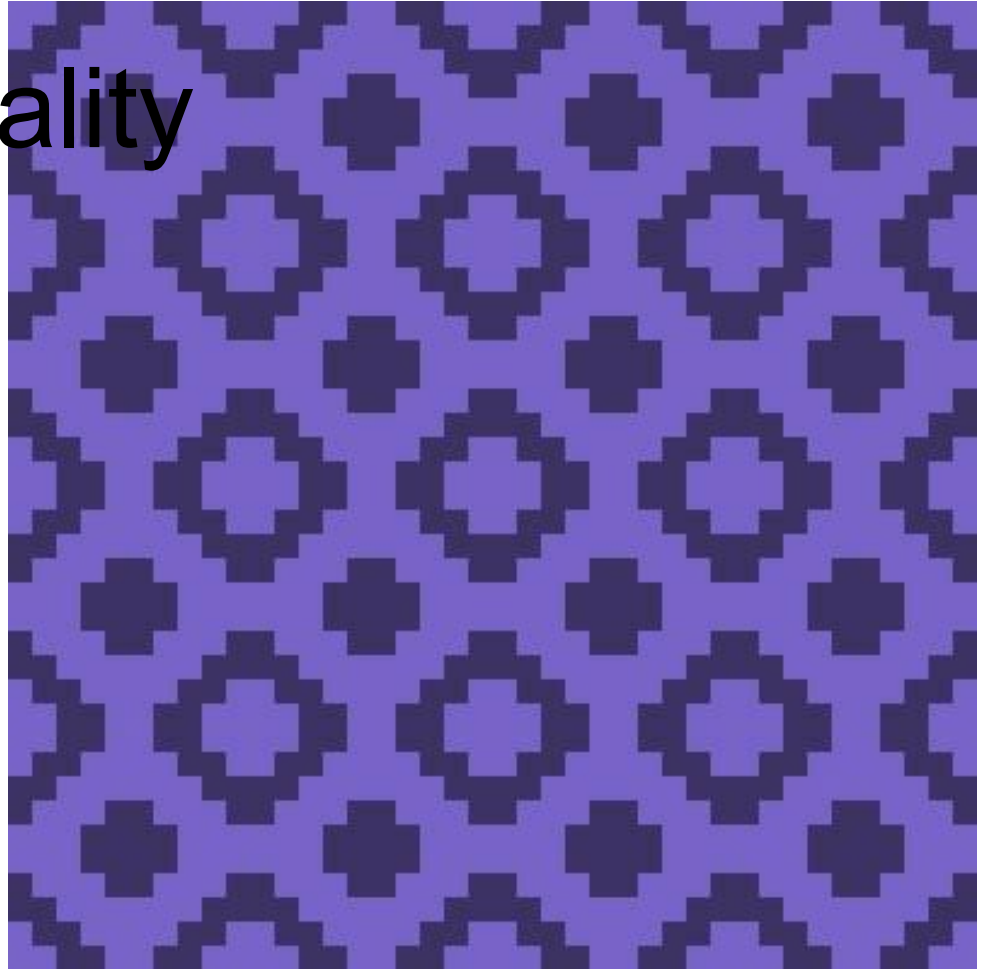


Slides from the Assigned Videos

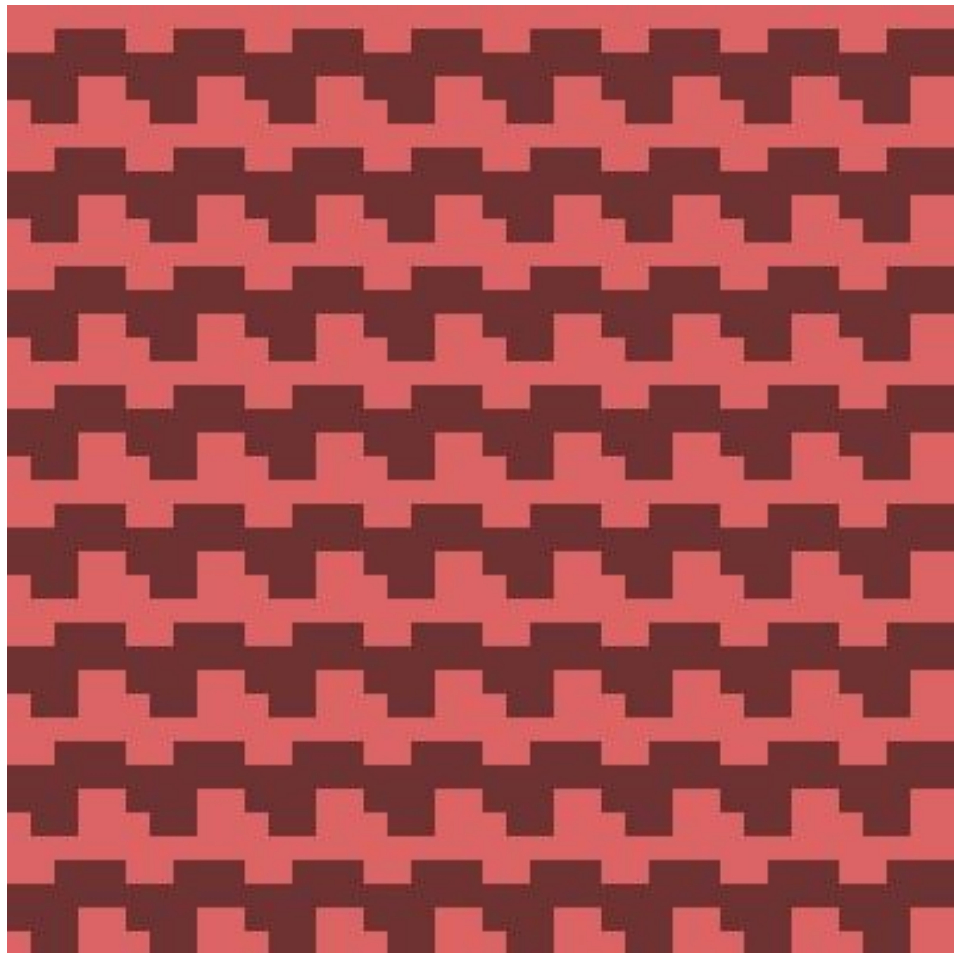
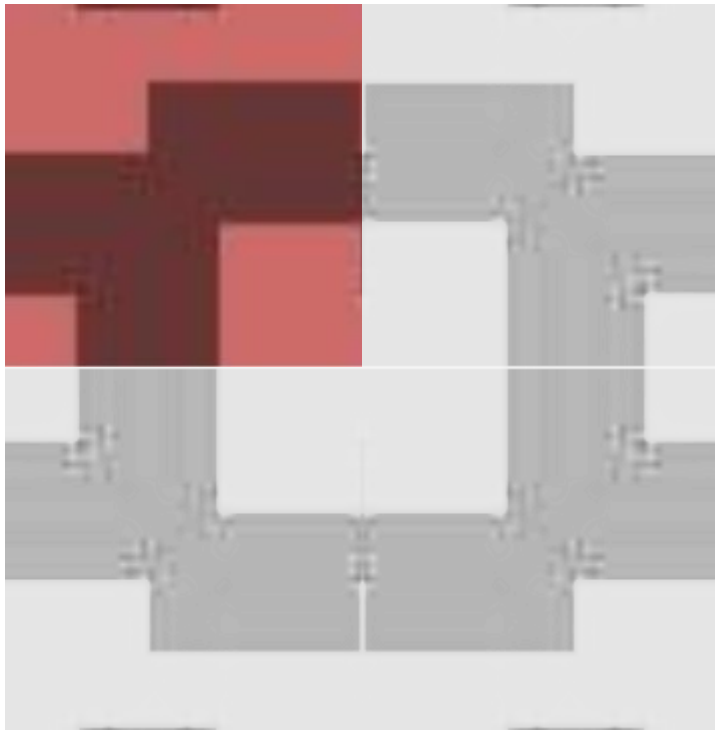


Adding Functionality

Creating blocks is an arduous task. We'd like a way to make new blocks out of old ones! How many different kinds of blocks are found in this image? How are they related to one another?



Example block...

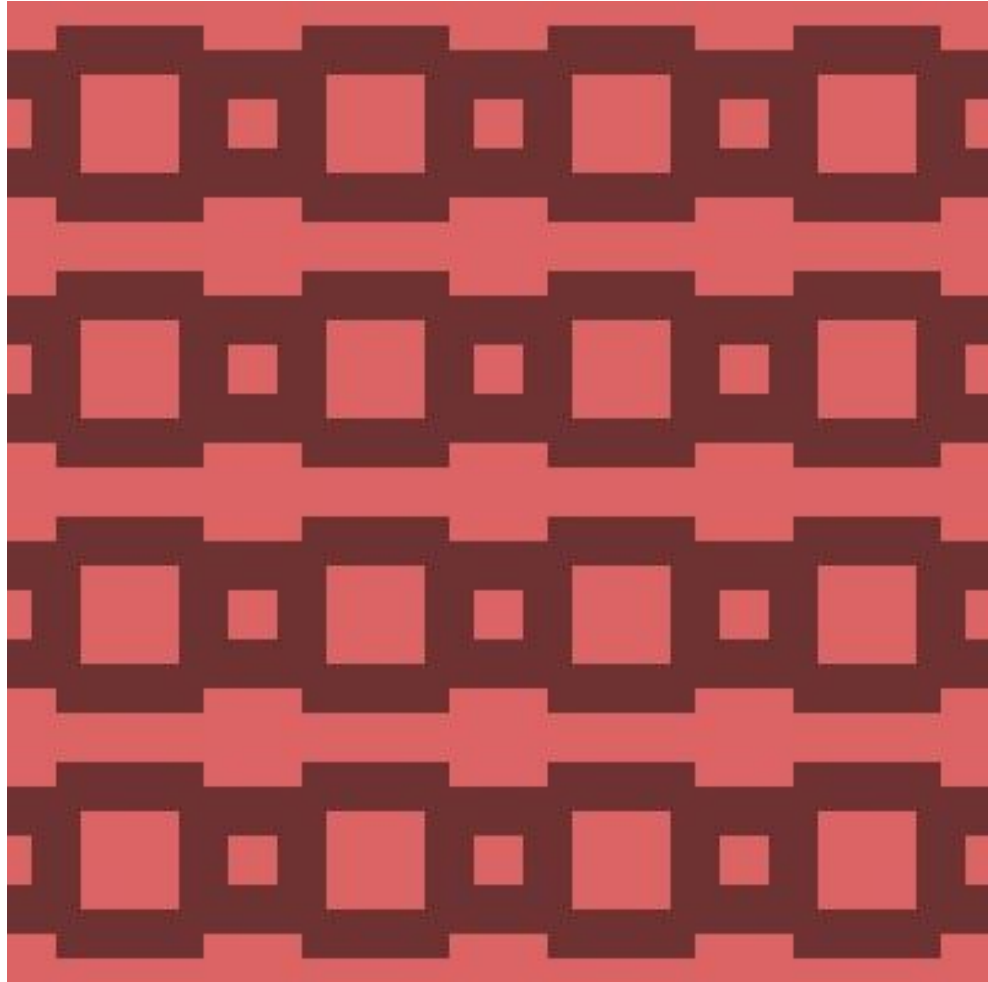


A Block Pattern

We can use that one block to create a surprising pattern!

TODOS:

1. Write flippy member functions
2. Use them to create patterns



A Block Pattern

Positions:

Row

Column

