

## Administrative Stuff

### CIS 1068

March 24, 2026

- ▶ **Today's office hours:** 11 - 12 and by appointment
- ▶ Assignment 8. Note due date
- ▶ Reading: up to ch 8. 9 soon
- ▶ **Midterm 2:** March 31 in class



## Midterm 2

March 2026

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

### you'll need

- ▶ Pencils
- ▶ Your TUID. It's a number (9xxxxxx)
- ▶ Which section (1 - 6)? It's on your schedule

## Last Time

- ▶ Tuesday, March 31 in class
- ▶ covers chapters 1 - 8 (up to and include beginning classes)
- ▶ practice problems posted soon
- ▶ cheat sheet. handwritten only. what to include
- ▶ up to 2 bonus points for cheat sheet if it meets all:
  - ▶ your name
  - ▶ your correct TUID
  - ▶ your correct section number
  - ▶ it's handwritten
- ▶ review of public, private
- ▶ accessors and mutators (*aka* getters and setters)
- ▶ arrays of point



# Today

- ▶ deep comparison and `equals()`
- ▶ deep copy and `clone()`
- ▶ method overloading
- ▶ composition



# Bug class

Write a Bug class that models a bug moving along a horizontal line, either to the right or to the left. Initially, the bug moves right, but it can turn to face either direction. Every time it moves, it moves one unit in the direction it's facing.

## every bug has

- ▶ a name
- ▶ a position
- ▶ a direction

## methods

- ▶ constructor accepts `initialPosition` as parameter
- ▶ other methods:

- ▶ `turn()`
- ▶ `move()`
- ▶ `getPosition()`
- ▶ `toString()`
- ▶ `equals()`
- ▶ `clone()`

