EXAM REVIEW!!!

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- Wednesday, October 7th during class
  - Review tonight @ 7, in this room (Towne 100)
- Covers everything through functions
- Pencil & paper, so be ready...
- Practice exams on website under Policies -> Exam Procedures & Practice Exams

YOUR REQUESTS

Topics we've covered include (very broadly)...

- Variables (assignment, use)
- Types (e.g., ints, floats, strings, etc.)
- Conditionals
- for loops
- while loops
- Applying knowledge in PennDraw
- Sequences (e.g., lists, strings, ranges)
- File reading
- Command line arguments
- Functions

Practice: Fill in the blank

Your friend Susan runs a website, howmanyheatwaves.com. She takes regular temperature readings and then reports how many days are a "heatwave day", that is, days where the temperature went above 85 degrees.

Help her finish the `count_heatwave_day` function, which takes a flat list of hourly temperature readings and the number of readings recorded per day. The function should check if each day experienced at least one temperature strictly greater than $85^{\circ}\mathrm{F}$, and return the total count of heatwave days. e.g.,

```
all_temps = [
    72, 68, 75, 84, 82, 70, 79, 81,  # Day 1 (Max: 84°F)
    65, 70, 78, 80, 86, 74, 83, 82,  # Day 2 (Max: 86°F)
    89, 91, 95, 87, 84, 78, 88, 80   # Day 3 (Max: 95°F)
]
count_heatwave_days(all_temps, 8) # --> should return 2
```

```
def count_heatwave_days(temperatures, readings_per_day):
    total_days = len(temperatures) // readings_per_day
    heatwave_days = 0

    for day_number in range(_BLANK_0_):
        is_heatwave = False
        start = day_number * readings_per_day
        end = start + _BLANK_1_
        daily_temps = temperatures[_BLANK_2_]

        for temp in daily_temps:
            if temp > 85:
                is_heatwave = True

        if is_heatwave:
          heatwave_days = _BLANK_3_
```

```
def count_heatwave_days(temperatures, readings_per_day):
    total_days = len(temperatures) // readings_per_day
    heatwave_days = 0

    for day_number in range(total_days):
        is_heatwave = False
        start = day_number * readings_per_day
        end = start + readings_per_day
        daily_temps = temperatures[start:end]

        for temp in daily_temps:
            if temp > 85:
                is_heatwave = True

        if is_heatwave:
          heatwave_days = heatwave_days + 1
```

Practice: Writing a Function

Complete the function called `seesaw`. The function whould check to confirm that the given string of digits switches back and forth between even and odd numbers. `seesaw` should return True if the string does so, and False otherwise. Remember to account for the string starting with either an odd or an even digit. e.g.,

INPUT	RESULT
seesaw("4321")	True
seesaw("4322")	False
seesaw("3856")	True

```
def seesaw(numbers : string) -> bool:
  # write your code here
```

ONE POSSIBLE SOLUTION

```
def seesaw(numbers : str) -> bool:
  first = int(numbers[0])
  prev_even = first % 2 == 0 # set to if first value is even (boolean)

  for i in numbers[1:]: # don't include first digit since it's used abov
    curr_even = int(i) % 2 == 0
    if prev_even == curr_even:
      return False
    prev_even = curr_even
  return True
```