Objectives

- Writing to files
  - Practicing refactoring

Your Supervisor

Review

- How do we read from files?
- Why do we need to handle reading numerical data specially?
- How do we write to files?

Handling Numeric Data

- We have been dealing with reading and writing *strings* so far
  - ➢ Read from a file: get a string
  - ➢ Write to file: use a string
- What do we need to do to **read numbers** from a file?
  - ➢ Cast as a numeric type, e.g., `int` or `float`
- How can we **write numbers** to a file?
  - ➢ Cast number as a `str` or use `format method`

Review: Problem: Temperature Data

- **Given**: data file that contains the daily high temperatures for last year at one location
  - ➤ Data file contains one temperature per line
  - ➤ Example: `data/florida.dat`
- **Problem**: What is the average high temperature (to 2 decimal places) for the location?

> **Rule of Thumb**: Always look at data file before processing it

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Problem: Create a Summary Report

- **Given**: a file containing students names and their graduation years for this class
- **Problem**: create a report (in a file) that says the graduation year and how many students from that year are in this class, on the same line.

> Do we need to start this program from scratch?
> Have code we can use or repackage?

writeSumReport.py