Exercise 3.1

Develop a "real estate assistant" program. The "assistant" helps the real estate agent locate houses of interest for clients. The information about a house includes its kind, the number of rooms, the asking price, and its address. An address consists of a house number, a street name, and a city.

Represent the following examples using your classes:

- Ranch, 7 rooms, $375,000, 23 Maple Street, Brookline
- Colonial, 9 rooms, $450,000, 5 Joye Road, Newton
- Cape, 6 rooms, $235,000, 83 Winslow Road, Waltham

Exercise 3.2

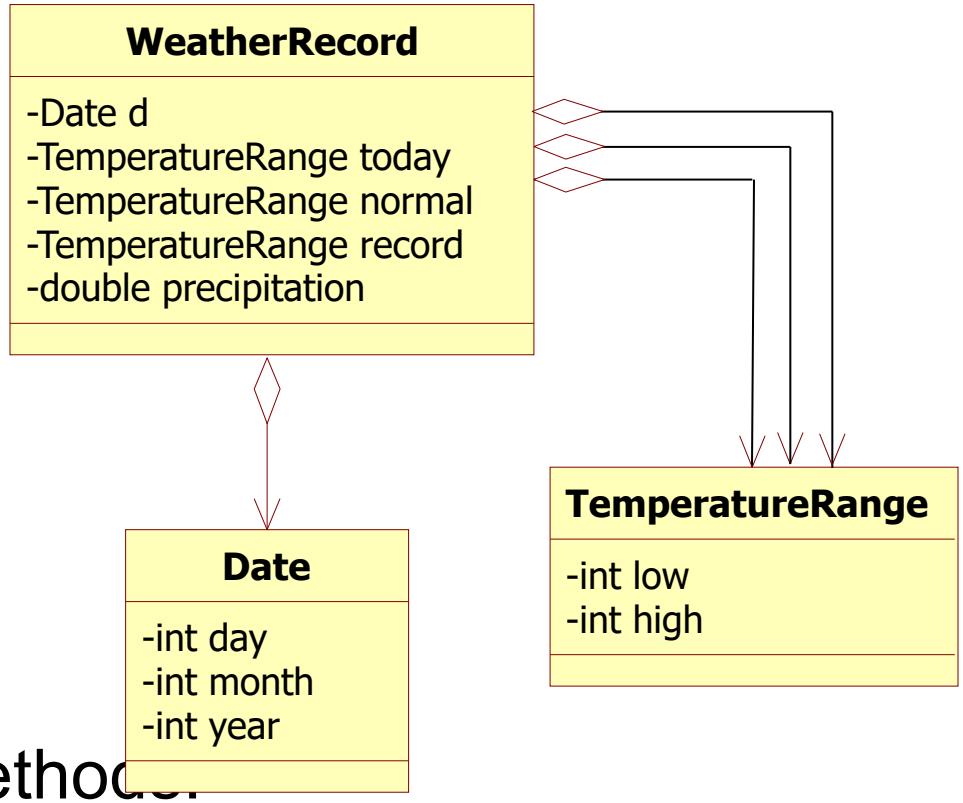
. . . Develop a program that assists bookstore employees. For each book, the program should track the book's title, its price, its year of publication, and the author. A author has a name and birth year.

- Develop the following methods for this class:
  - `currentBook` that checks whether the book was published in 2004 or 2003;
  - `currentAuthor` that determines whether a book was written by a current author (born after 1940);
  - `thisAuthor` that determines whether a book was written by the specified author;
  - `sameAuthor` that determines whether one book was written by the same author as some other book;
  - `sameGeneration` that determines whether two books were written by two authors born less than 10 year apart.

Solution

Exercise 3.3

- Provides the data definition for a weather recording program.



- Develop the following methods:
  - **`withinRange`**, which determines whether today's high and low were within the normal range;
  - **`rainyDay`**, which determines whether the precipitation is higher than some given value;
  - **`recordDay`**, which determines whether the temperature today broke either the high or the low record.

Solution