Streams, Objects, Classes

Important Dates:

- Assigned: October 9, 2024

- Deadline: November 6, 2024 at 11:59 PM EST

Objectives:

- Students learn to use the Stream API and its methods to solve a problem.

- Students design classes as blueprints for objects.

What To Do:

Because we're introducing classes with this problem set, it is no longer appropriate to use the class name `ProblemX`. Instead, design classes with the given specification in each problem, along with the appropriate test suite. **Do not round your solutions!**

You must write sufficient tests and adequate documentation.

All problems are listed in *Learning Java - A Test-Driven Approach.* This problem set contains eight required problems, meaning the maximum possible score is 100%/100%.

Note: for problems 1-4, create the `StreamMethods` **class, and place the methods that you design, in this class.**

1. Exercise 3.68   [*Any matches?*]

2. Exercise 3.70   [*Map and map again*]

3. Exercise 3.72   [*Filter the long ones out*]

4. Exercise 3.80   [*Putting everything together*]

5. Exercise 4.5   [*Music system*]

6. Exercise 4.8   [*Matrix framework*]

7. Exercise 4.20   [*Persistent data structure*]

8. Exercise 4.23   [*Poor man's* `StringBuilder`]