Description

Your Learning Progress Tracker is fine, but it is missing a few important features. We need to know which students have completed which courses and send the acknowledgments of their success, as well as personal certificates to them. Remember we asked students to specify their full names and email addresses? Now it's time to use this personal information to contact the top students.

Don't forget that each student who has completed a course should receive a letter of acknowledgment only once, as spamming is not a good idea. Use the following format for your messages:

To: %EMAIL_ADDRESS%

Re: Your Learning Progress

Hello, %FULL_USER_NAME%! You have accomplished our %COURSE_NAME% course!

where %EMAIL_ADDRESS%, %FULL_USER_NAME% and %COURSE_NAME% are placeholders for a student email address, full name, and a course name respectively.

Let's implement this notification feature so that we can use it with a single console command. Unit tests can help you to deliver the required functionality.

Objectives

- 1. Add a new command to your program: notify. When users enter this command, your program should print a list of messages to students in the format above. Below the list, print the total number of students that should be notified, for example: Total 5 students have been notified.
- 2. Make sure that your program generates only one notification for each trigger event. The trigger event is the completion of any course by a student.
- 3. The messages generated by your program must contain the personal information of the students, such as an email address and the full name, as well as the name of the relevant course, if applicable.

Example

Example 1: outputting pending notifications

```
Learning Progress Tracker
> add students
Enter student credentials or 'back' to return:
> John Doe johnd@email.net
The student has been added.
> Jane Spark jspark@yahoo.com
The student has been added.
> back
Total 2 students have been added.
> list
Students:
10000
10001
> add points
Enter an id and points or 'back' to return:
> 10000 600 400 0 0
Points updated.
> back
> notify
To: johnd@email.net
Re: Your Learning Progress
Hello, John Doe! You have accomplished our Python course!
To: johnd@email.net
Re: Your Learning Progress
Hello, John Doe! You have accomplished our DSA course!
Total 1 students have been notified.
> notify
Total 0 students have been notified.
> exit
Bye!
```