

SECOND QUIZ

You have 15 minutes from the start of class to complete this quiz. Read the questions with care; work with deliberate speed. Don't give us more than we ask for. The usual instructions apply. Good luck!

Accompanying this quiz is a version of the Restaurants program very similar to the ones you've already seen. Write your name on that page; you'll turn it in with the quiz.

Problem 1 (4 points)

In the Collection class, we have added a definition for a function that takes a Collection object and returns its length (i.e., the number of Restaurant objects currently in the collection). There's one blank in that definition; fill it in to complete the definition correctly. [The predefined function `len` (without the underscores) takes a sequence (such as a list) and returns the number of items it contains. We'll talk in class about how `len` and `__len__` are related, but here, you just need to fill in the blank.]

Problem 2 (16 points)

(a) Modify the program (writing your modifications on the page of code) so that it keeps track of the total number of restaurants added during the course of the program (whether or not those restaurants are deleted later, or re-added—just count the number of times a restaurant was added). Your modified program should print at the end, right before “Thank you,” a line like this:

```
Number added: 15
```

This requires just three lines of code; one line in each of three places, all in the main (controller) part of the program. To keep things consistent, use the variable name `numAdded` in your code.

(b) Modify the program (writing your modifications on the page of code) so that it keeps track of the total number of restaurants *removed* during the course of the program (whether or not those restaurants are re-added later—just count the number of restaurants that were removed). Remember that the ‘remove’ command removes all the restaurants with the same name, so doing that command once might remove multiple restaurants, all of which your modified program should count. Your modified program should print at the end, right before “Thank you,” a line like this:

```
Number removed: 6
```

This can be done in just four lines of code, all in the main (controller) part of the program; if it takes you a line or two more, that's okay. To keep things consistent, use the variable name `numRemoved` in your code.