

Part 2: Triggers (PhraseTriggers)

(5/5 points)

PHRASE TRIGGERS

At this point, you have no way of writing a trigger that matches on "New York City" -- the only triggers you know how to write would be a trigger that would fire on "New" AND "York" AND "City" -- which also fires on the phrase "New students at York University love the city". It's time to fix this. Since here you're asking for an exact match, we will require that the cases match, but we'll be a little more flexible on word matching. So, "New York City" will match:

- New York City sees movie premiere
- In the heart of New York City's famous cafe
- New York Cityrandomtexttoproveapointhere

but will not match:

- I love new york city
- I love New York City!!!!!!!!!!!!!!

PROBLEM 9

Implement a phrase trigger (`PhraseTrigger`) that fires when a given phrase is in **any** of the story's subject, title, or summary. The phrase should be an argument to the class's constructor. You may find the Python operator `in` helpful, as in:

```
>>> print "New York City" in "In the heart of New York City's famous cafe"
True
>>> print "New York City" in "I love new york city"
False
```

When this is done, the `PhraseTrigger` unit tests should pass.

Canopy specific instructions: Every time you modify code in `ps7.py` go to Run -> Restart Kernel (or hit the CTRL with the dot on your keyboard) before running `ps7_test.py`. **You have to do this every time you modify the file `ps7.py` and want to run the file `ps7_test.py`**, otherwise changes to the former will not be incorporated in the latter.

Note: In addition to the class in this problem (`PhraseTrigger`), please provide your definitions of `WordTrigger` , `TitleTrigger` , `SubjectTrigger` , and `SummaryTrigger` in the following box.

```
1 class WordTrigger(Trigger):
2     def __init__(self, word):
3         self.word = word.lower()
4
5     def isWordIn(self, text):
6         text = self.replacePunc(text)
7         return self.word in text.lower().split()
8
9     def replacePunc(self, text):
10        for p in string.punctuation:
11            text = text.replace(p, ' ')
12
13        return text
14 class SubjectTrigger(WordTrigger):
15     def evaluate(self, story):
16        return self.isWordIn(story.getSubject())
```