

CS2011 Intermediate programming and problem solving I

Week 9: Lecture Exercise Replit

In this lecture exercise, you will be modifying the `ThesaurusFileManager`, `main.py` and `Thesaurus` class in the following replit location:

<https://repl.it/@lauramaye/ThesaurusFileManager#thesaurus.py>

Note the following:

1. `thasaurusfilemanager.txt` contains 8 lines of text. Each line represented a word, alongside the word's corresponding synonym. The word is always in before the first comma and the synonyms are always the remaining words on that line. So for example, in the following line:

`investigate,inspect,probe,question`

`investigate` is the main word and `inspect`, `probe`, `question` are synonyms of `investigate`.

2. `ThesaurusFileManager` is a class that reads in from a file and formats the lines in a dictionary format. This dictionary should contain the main word as a key and the synonyms as values. So for example, `ThesaurusFileManager` could be used to format the following:

`investigate,inspect,probe,question`

To:

```
{ "investigate": ["inspect", "probe", "question"] }
```

3. `Thesaurus`: This is a class we created together in Week 6. The class `Thesaurus` accepts a dictionary, which contains a word (as key) and a list of synonyms (as values).

QUESTION 5

	Inside <code>ThesaurusFileManager</code>
	Add the following method:
A	<code>def get_line_number_dict(self, line_num):</code>
	This method should do the following: <ol style="list-style-type: none">a) Retrieve the line number specified at <code>line_num</code> from the <code>thesaurusfilemanager.txt</code>b) Format the returned line in dictionary format. For example, if the following was called: <code>get_line_number_dict(1)</code>

	<p>Then the following should output:</p> <pre>{ "investigate": ["inspect", "probe", "question"] }</pre> <p>c) Return the resulting dictionary</p> <p>There is no need to check if the line number is in the file.</p>
	Inside main.py
B	Call get_line_number_dict()
	<p>Create an instance of the ThesaurusFileManager class inside main.py.</p> <p>Referring to your instance of ThesaurusFileManager, call get_line_number() and pass in a line number of your choice.</p> <p>Store the returned dictionary in a variable.</p>
C	Object interactions
	<p>Modify the code in main.py so that it makes use of the returned dictionary from part B as opposed to the fixed dictionary assigned.</p>