File Homework  
CS 100 2015F

**Due** (section dependent)  
**Submit** your solutions as a .py file via Moodle.

**Read** chapter 4.3 in the textbook. Do the practice problems embedded in the text *before you look at the solutions at the back of the chapter*. Compare your solutions to the solutions given in the textbook.

The following problems are the same in the first and second editions of Perkovic.

**HW Problem 1.** Do problem 4.27 in the textbook.  
**HW Problem 2.** Do problem 4.29 in the textbook.  
**HW Problem 3.** Write a function named repeatWords() that takes two string parameters:

1. the name of an input file that exists before repeatWords() is called
2. the name of an output file that repeatWords() creates

Assume that the input file is in the current working directory and write the output file to that directory.

For each line of the input file, the function repeatWords() should write to the output file all of the words that appear more than once on that line. Each word should be lower cased and stripped of leading and trailing punctuation. Each repeated word on a line should be written to the corresponding line of the output file only once, regardless of the number of times the word is repeated.

For example, if the following is the content of the file catInTheHat.txt:

*Too wet to go out and too cold to play ball.  
So we sat in the house.  
We did nothing at all.  
So all we could do was to Sit! Sit! Sit! Sit!*

The following function call:

inF = 'catInTheHat.txt'  
outF = 'catRepWords.txt'  
repeatWords(inF, outF)

should create the file ‘catRepWords.txt’ with the content:

*too to  
sit*

Hint: for each line, create a list of repeated words and then write the list (without repetition) to the outfile. Be sure to test your solution with input in which some repeated words on a line are a mixture of upper and lower case, and in which repeated words sometimes are preceded or followed by punctuation.