

# Regular Expressions Homework

*Oct. 19, 2010*

## Regular Expressions

For this homework, you'll be using the python module `redict2.py`, which you should download from today's class page. It contains a useful function called `getword(pat)`, which takes in a regular expression and finds any words within the scrabble dictionary that contain that word. For example, `getword('quiz')` would return `'quiz'`, `'quizzes'`, `'quizzed'`, and a whole host of other words, whereas `getword('[a-z]')` would return any word with a lowercase letter in it (the whole dictionary).

NOTE: Make sure you also download `scrabble.txt` from the website, and change `getbook()` within `redict2.py` so that it points to the file.

Write out the regular expressions you would use to make `getword()` return:

1. All of the words with two z's in a row.
2. All of the words with two vowels in a row.
3. All of the words with more than two vowels in them.
4. All of the words with two x's in them.

Now take the list of words with a q not followed by a u, and sort them by point value. Hint: think about summing the letter scores for each word. Do you need 26 if statements to add a letter's value, or can you put letters into groups by point value and say, for instance, "if w in 'ertuioasln'...?"

Point values : <http://www.scrabblepages.com/scrabble/rules/>

Send us the code for this last part, as well as the calls to `getword()` with the appropriate regular expressions, as the file `YOURNAMereg1.py`.