

## Week 3 Lab Assignment Goals

- Use regular expressions<sup>1</sup>
- Revise Git commands

### Step 1 : Create a GitHub repository

- Go to <https://classroom.github.com/assignment-invitations/12785d7afd8ed6ea5e131a5a8b30bff4>
- Accept the assignment invite

### Step 2 : Get starter code onto your machine

- Like last week, clone the assignment repository onto your machine
- 'cd' to the cloned directory

### Step 3 : Regular Expressions - Part 1

- part1.py accepts regular expressions and prints the list of words from 'words.txt' that match the expression. Type Ctrl+C to exit the program.
- Answer the following questions using part1.py and [regex documentation](#).
- Enter your answers in 'part1\_answers.txt'
  1. How many words end in the letter 'a'?
  2. The regex [aeiou]\$ indicates there are 6988 words that end with a vowel. How many words start and end with a vowel?
  3. How many words start and end with the same vowel? Extreme and aorta are two such words.
  4. The words obsequious and pharmacopoeia each contain four vowels in a row. How many words contain four consecutive vowels?

### Step 4 : Regular Expressions - Part 2

- Look at littlebrother.txt. We will be using this file in this section. If you are running into an encoding error when opening the file, use: `f = open('littlebrother.txt', encoding = "ISO-8859-1")`
- Create a separate file part2.py, and write code to:
  1. Calculate how many web sites start with 'http:' are in littlebrother.txt.
  2. Calculate how many words in littlebrother.txt have a number in them (examples: 68, 6A, word2).
  3. Calculate how many numbers are in littlebrother.txt (Don't count words that have any symbols that are not digits. 456 is good, but 786-3452 and 6A would not count)
  4. Calculate how many words in littlebrother.txt have at least one digit and at least one letter (examples: 63A, word26).
- Enter your answers into part2\_answers.txt

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<sup>1</sup> This week's lab reuses most of a [lab assignment](#) developed by Prof. Susan Rodgers at Duke University.

**Step 5 : Commit your changes**

- Commit and push all your changes to the remote repository