Assignment

March 5, 2016

1 Reading and Writing Data

In this assignment you will be reading and writing data. In this folder are 3 included data files ending in `csv`, `json` and `pkl`. These are different fileformats that exist. If you run

```
head data.csv # or pkl # or json
```

You'll see that there is some method to the madness but that each file has its peculiarities. Each file contains a portion of the total dataset that you will be operating on. So you will need to read in all of the files, put them in some standard format that you are comfortable with. Remember in the sorting lesson how I showed a list of objects? Or a list of classes? Something standard like that where each "row" is the same format.

After you've standardized all of the data, report the following bits of information by writing them to a csv file labelled `question_1.csv`, `question_2.csv` etc.

1. What are the unique countries are there in the dataset?
2. What are the unique email domains are in the dataset?
3. What is the first name of everyone that does not have a P.O. Box address?
4. What are the first 5 names of people when you sort the list of data you have by Country?
5. What are the first 5 names of people when you sort the list of data you have by phone number?

1.0.1 Restrictions

You may only use the three standard library imports

```
import json
import csv
import pickle
```

I have included a `hint.txt` file that provides a hint. I would advise that you proceed without looking at it but it is there if you need it!

1.0.2 Updates

- You may use regular expressions if you wish to extract data from each row. You do not need to use them if you do not want to or see a need to.