7/18/2019 location.py

```
#!/bin/python
 1
 2
 3
   import csv
   import re
4
5
   # open up `hospitals temp.csv` and write to `hospitals info.csv`
7
   with open('hospitals_temp.csv', 'rb') as infile, open('hospitals_info.csv', 'wb') as
    outfile:
8
9
        reader = csv.reader(infile)
10
        # skip header in `hospitals temp.csv`
11
        next(reader, None)
12
13
        writer = csv.writer(outfile, delimiter=',', quoting=csv.QUOTE MINIMAL)
14
15
16
        # here's a better header
        writer.writerow(['Provider ID', 'Hospital Name', 'Address', 'City', 'State', 'ZIP
17
    Code', 'lat', 'lng'])
18
        for row in reader:
19
20
            provider_id = row[0]
21
            name = row[1]
22
            street = row[2]
23
            city = row[3]
24
            state = row[4]
25
            zip code = row[5]
26
            location = row[6]
27
            # `match` looks for a latitude and longitude. Considering
28
            # the geography of the U.S. (and most of its territories),
29
30
            # the first number will always be positive (north), while
            # the second number will always be negative (west) (except
31
            # for some islands in Alaska that don't have hospitals).
32
33
            match = re.search( r' d* .. d* .. d* .. d*', location )
34
35
            if match:
36
                # if we get a match, then split the match by the comma, and write a row in the
    new csv
37
                point string = match.group()
                point_array = [n.strip() for n in point_string.split(',')]
38
39
    writer.writerow([provider id,name,street,city,state,zip code,point array[0],point array[1
    ]])
            else:
40
                # all the csvs will match, so this case will never happen
41
                writer.writerow([provider id,name,street,city,state,zip code,'NA','NA'])
42
43
```