

1-panama-PRESENTACION

July 28, 2016

pip install pandas geocoder folium
[Addresses.csv](#)

```
In [1]: import pandas
```

```
adds = pandas.read_csv("data/Addresses.csv", dtype=str)
adds.head()
```

```
Out[1]:
```

	address \	icij_id \	valid_until	country_codes \	
0	-\\t27 ROSEWOOD DRIVE #16-19 SINGAPORE 737920	6991059DFFB057DF310B9BF31CC4A0E6	The Panama Papers	data is current through 2015	SGP
1	"Almaly Village" v.5, Almaty Kazakhstan	C65A269424AA1A8BBAC416FA30150938	The Panama Papers	data is current through 2015	KAZ
2	"Cantonia" South Road St Georges Hill Weybridg...	240EE44DFB70AF775E6CD02AF8CB889B	The Panama Papers	data is current through 2015	GBR
3	"CAY-OS" NEW ROAD; ST.SAMPSON; GUERNSEY; CHANN...	340C6D3D2FC60AE58C53BB3618129C43	The Panama Papers	data is current through 2015	GGY
4	"Chirag" Plot No 652; Mwamba Road; Kizingo; Mo...	6DBCD74F5AAB63EABC166885CE8CD7CD	The Panama Papers	data is current through 2015	KEN

	countries	node_id	sourceID
0	Singapore	14000001	Panama Papers
1	Kazakhstan	14000002	Panama Papers
2	United Kingdom	14000003	Panama Papers
3	Guernsey	14000004	Panama Papers
4	Kenya	14000005	Panama Papers

```
In [2]: adds=adds[adds['countries']=='Chile']
adds=adds[adds['address'].str.contains("Santiago")]
adds.head()
```

```

Out [2]:
24883  Aguas Claras 220; Dept 61; Lo Barnechea; Santi...
24887  Agustin del Castillo 2400; Depto. 501; Comuna ...
25887  Alcalde Edo Castillo Velasco 2054; Ñuñoa; Sant...
26105  Alonso de Sotomayor 4200; Dp. 503; Vitacura; S...
26234  Amapolas 1625; Depto.605; Providencia; Santiag...

                icij_id \
24883  46749D72F7E660E52A483B3CA3EB7B70
24887  C5E4806B33902C4F1F65D1856C3BB21A
25887  777AAC999799D024AECABE60BFD5C51B
26105  52C2383B9B60D005B6B7E9214FF28B49
26234  ED343556BD9F48DDAAD62CE76783001

                valid_until country_codes \
24883  The Panama Papers  data is current through 2015          CHL
24887  The Panama Papers  data is current through 2015          CHL
25887  The Panama Papers  data is current through 2015          CHL
26105  The Panama Papers  data is current through 2015          CHL
26234  The Panama Papers  data is current through 2015          CHL

        countries  node_id  sourceID
24883      Chile  14025407  Panama Papers
24887      Chile  14025411  Panama Papers
25887      Chile  14026411  Panama Papers
26105      Chile  14026629  Panama Papers
26234      Chile  14026758  Panama Papers

```

```

In [3]: import geocoder
g = geocoder.google(u"Pdte Errazuriz 3485, Las Condes, Chile" )
print g.latlng

```

```

[-33.4210835, -70.5918529]

```

```

In [4]: import folium
import unicodedata
coords = []
x=0
for name, row in adds.iterrows():
    x+=1
    if x>200:
        break
    try:
        add= u"%s" % row['address']
        add = unicodedata.normalize('NFD', add).encode('ascii', 'ignore')
        g = geocoder.google(u"%s" % add)
        lat, lon = g.latlng

```

```

        coords.append(tuple(g.latlng))
    print lat, lon
except:
    print 'fail', add
    continue

-33.3582893 -70.5469872
-33.3905211 -70.5724124
fail Agustin del Castillo 2400; Depto. 501; Comuna de Vitacura; Santiago; Chile.
-33.378039 -70.6346786
-33.4303296 -70.5907291
fail Amapolas 1625; Depto.605; Providencia; Santiago; Chile.
fail Amapolas 1625; Depto.605; Providencia; Santiago; Chile.
-33.3742128 -70.6367425
-33.4098736 -70.7240893
-33.4488897 -70.6692655
-33.4488897 -70.6692655
fail Avenida del valle 961; Oficina 3705; Ciudad Empresarial Huechuraba; 8580710 Sa
-33.4421135 -70.7640644
-33.4510482 -70.6024573
-33.3975364 -70.5835587
-33.3400588 -70.5513969
-33.3703906 -70.5117619
-33.3758858 -70.5793991
-33.4484692 -70.6150504
-33.4054373 -70.5762715
-33.4087844 -70.567069
fail C/El Convento 720; Comuna De Las Condes; Santiago Chile
fail Calle Asturias 280; oficina 701; Las Condes; Santiago de Chile; Rep. de Chile
-33.4437335 -70.6279455
-33.4151297 -70.5922177
fail Calle El Golf 40 piso 12, Las Condes Santiago de Chile
fail Calle El Golf 40 piso 12, Las Condes Santiago de Chile
-33.4586717 -70.5611267
fail Camberra 620; La Reina; Santiago; Chile.
-33.3243917 -70.5438346
-33.3958845 -70.5411324
-33.396093 -70.5411396
-33.411979 -70.5349449
fail Con domicilio en Rio Guadiana 9226; Las Condes; Santiago; Chile
fail Con domicilio en Rio Guadiana 9226; Las Condes; Santiago; Chile
-33.3548464 -70.5165236
fail Encomenderos 253; Oficina 12; Comunas de las Condes; Santiago de Chile; 755016
-33.3969263 -70.5995975
-33.3905211 -70.5724124
-33.4302275 -70.6177735
-33.2832474 -70.6345255
-33.4314935 -70.6230085

```

fail Huelen 56; Dpto.B; Proviencia; Santiago; Chile.
 -33.4399766 -70.6531155
 -33.4396961 -70.6516047
 -33.4330125 -70.6234459
 -33.4160087 -70.5668379
 fail La Capitania 939 depto. 165; Las Condes; Santiago; Chile.
 -33.4311581 -70.6025654
 -33.4078266 -70.5758832
 -33.3608369 -70.5273465
 -33.3892541 -70.5884347
 -33.4143118 -70.5935384
 fail Magdalena 140; Piso 21; Las Condes; Santiago; Chile
 fail Magdalena 140; Piso 21; Las Condes; Santiago; Chile
 fail Magdalena 140; Piso 21; Las Condes; Santiago; Chile
 -33.4438264 -70.6173071
 -33.4293898 -70.6277326
 -33.399852 -70.598181
 -33.2824072 -70.7384418
 fail Panamericana Norte 1890; Lampa Santiago; Chile
 -33.3615798 -70.482196
 fail Pastor Fernandez 16200 Lo Barnechea; Santiago; Chile
 -33.4400089 -70.5483545
 fail Principe de Gales 8007 A La Reina; Santiago; Chile.
 fail Principe de Gales 8007 A La Reina; Santiago; Chile.
 -33.4087844 -70.567069
 -33.3291732 -70.7020092
 fail San Ignacio 101; Quilicura; Santiago; Chile.
 -33.4151832 -70.6006806
 fail San Sebastien; 27-30 Appt; 31 Las Condes; Santiago; Chile
 -33.3769042 -70.5832475
 -33.4235788 -70.5776717
 -33.3874219 -70.55135
 -33.3943929 -70.5929228
 -33.4143118 -70.5935384
 -33.4314474 -70.6093325
 -33.411979 -70.5349449
 -33.518938 -70.7668647
 -33.4087844 -70.567069
 -33.4004057 -70.5290537
 fail Camino Mirasol 1569; Santiago Las Condes; Chile
 -33.4238329 -70.6224425
 -33.4168157 -70.5985298
 -33.3740683 -70.5470884
 -33.4405776 -70.6453107
 -33.3594861 -70.4825932
 -33.3758394 -70.5773706
 -33.4186107 -70.5919693
 -33.545305 -70.6746371

```
-33.4202268 -70.6041302
-33.4556915 -70.6044907
-33.4315749 -70.6370635
-33.3845912 -70.534584
-33.4812278 -70.6341231
-33.3895687 -70.5408764
-33.4270004 -70.6125385
-33.3895687 -70.5408764
-33.4131274 -70.5913517
-33.4154993 -70.5953593
```

Stamen Toner

```
In [5]: map = folium.Map(location=[-33.39, -70.57], zoom_start=10, tiles='Stamen Toner')
        for coord in coords:
            lat,lon = coord
            map.add_children(folium.CircleMarker([lat,lon],color='rgba(255,0,0,0.75)',
                                                  fill_color='rgba(255,0,0,0.75)', radius=200))
        # Create and show the map.
        map.save('panama.html')
        map
```

```
Out[5]: <folium.folium.Map at 0x106029890>
```

[panama.html](#)