

```
import csv
import sys
import urllib
import json
import requests

# Call script as Geocode.py inputfilename
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# Code assumes that file contains one company (keyed by
# coname,statecode,datefirst) per line, with tab separated cols:
# coname      statecode      datefirstinv      address

input_file = sys.argv[1]
print("Reading data from ",input_file)
basename,ext=input_file.split('.')
out=basename+'-run.'+ext
output_file = open(out, 'w')
api_key = "AIzaSyBdCQXvmCEkMfcpmMPGZVCE3t2jjYJKHcA"   ###THIS IS A TEST KEY
api_url = "https://maps.googleapis.com/maps/api/geocode/json?"

f = open(input_file, 'r')
lines = f.readlines()
business_list = []
for line in lines:
    business_list.append(line.split('\t'))
output_file.write('{}\t{}\t{}\t{}\t{}\t\n'.format("coname", "statecode",
"datefirstinv","Latitude", "Longitude"))
business_list = business_list[1:]

i = 0
for business in business_list:
    coname, statecode, datefirstinv, address= business[0], business[1],
    business[2], business[3]
    print(coname)
    i+=1
    str_key, str_addr = urllib.parse.urlencode({'key':api_key}),
    urllib.parse.urlencode({'address':address})
    data = json.loads(requests.get(api_url+str_addr+'&'+str_key).text)
    if data["results"]:
        location = data["results"][0]["geometry"]["location"]
        output_file.write('{}\t{}\t{}\t{}\t{}\t\n'.format(coname, statecode,
        datefirstinv, location["lat"], location["lng"]))
    else:
        output_file.write('{}\t{}\t{}\t\t\n'.format(coname, statecode,
        datefirstinv))

f.close()
output_file.close()
```