

Cafe in Queens

Introduction

In this project, we will how convert addresses into their equivalent latitude and longitude values. Also, we will use the Foursquare API to explore neighborhoods in New York City. We will use the explore function to get the most common venue categories in each neighborhood, and then use this feature to group the neighborhoods into clusters. Then we will use the k-means clustering algorithm to complete this task. Finally, we will use the Folium library to visualize the neighborhoods in New York City and their emerging clusters.

Table of Contents

Introduction

1. Importing Libraries
2. Data Understanding and Preparation
3. Cleaning Of Data
4. Exploring Neighborhoods in Queens
5. Analyze Each Neighborhood
6. Cluster Neighborhoods
7. Examine clusters

1. Importing Libraries:

In [16]:

```
!conda install -c conda-forge beautifulsoup4 --yes  
!conda install -c conda-forge folium=0.5.0 --yes  
print('Libraries installed!')
```

Collecting package metadata: done

Solving environment: done

```
==> WARNING: A newer version of conda exists. <==  
current version: 4.6.14  
latest version: 4.7.5
```

Please update conda by running

```
$ conda update -n base -c defaults conda
```

```
# All requested packages already installed.
```

Collecting package metadata: done

Solving environment: done

```
==> WARNING: A newer version of conda exists. <==  
current version: 4.6.14  
latest version: 4.7.5
```

Please update conda by running

```
$ conda update -n base -c defaults conda
```

```
# All requested packages already installed.
```

```
Libraries installed!
```

In [17]:

```
pip install geocoder
```

```
Requirement already satisfied: geocoder in /srv/conda/envs/notebook/lib/python3.7/site-packages (1.38.1)
Requirement already satisfied: requests in /srv/conda/envs/notebook/lib/python3.7/site-packages (from geocoder) (2.22.0)
Requirement already satisfied: click in /srv/conda/envs/notebook/lib/python3.7/site-packages (from geocoder) (7.0)
Requirement already satisfied: future in /srv/conda/envs/notebook/lib/python3.7/site-packages (from geocoder) (0.17.1)
Requirement already satisfied: six in /srv/conda/envs/notebook/lib/python3.7/site-packages (from geocoder) (1.12.0)
Requirement already satisfied: ratelim in /srv/conda/envs/notebook/lib/python3.7/site-packages (from geocoder) (0.1.6)
Requirement already satisfied: urllib3!=1.25.0,!=1.25.1,<1.26,>=1.21.1 in /srv/conda/envs/notebook/lib/python3.7/site-packages (from requests->geocoder) (1.25.3)
Requirement already satisfied: idna<2.9,>=2.5 in /srv/conda/envs/notebook/lib/python3.7/site-packages (from requests->geocoder) (2.8)
Requirement already satisfied: chardet<3.1.0,>=3.0.2 in /srv/conda/envs/notebook/lib/python3.7/site-packages (from requests->geocoder) (3.0.4)
Requirement already satisfied: certifi>=2017.4.17 in /srv/conda/envs/notebook/lib/python3.7/site-packages (from requests->geocoder) (2019.6.16)
Requirement already satisfied: decorator in /srv/conda/envs/notebook/lib/python3.7/site-packages (from ratelim->geocoder) (4.4.0)
Note: you may need to restart the kernel to use updated packages.
```

In [18]:

```
# use the inline backend to generate the plots within the browser
%matplotlib inline

import matplotlib as mpl
import matplotlib.pyplot as plt

mpl.style.use('ggplot') # optional: for ggplot-like style

# check for latest version of Matplotlib
print('Matplotlib version: ', mpl.__version__) # >= 2.0.0
```

```
Matplotlib version: 3.1.1
```

In [19]:

```
import numpy as np # Library to handle data in a vectorized manner

import pandas as pd # Library for data analysis
pd.set_option('display.max_columns', None)
pd.set_option('display.max_rows', None)

import json # Library to handle JSON files

!conda install -c conda-forge geopy --yes # uncomment this line if you haven't completed the Foursquare API lab
from geopy.geocoders import Nominatim # convert an address into latitude and longitude values

import requests # Library to handle requests
from pandas.io.json import json_normalize # transform JSON file into a pandas dataframe

# Matplotlib and associated plotting modules
import matplotlib.cm as cm
import matplotlib.colors as colors

# import k-means from clustering stage
from sklearn.cluster import KMeans

!conda install -c conda-forge folium=0.5.0 --yes # uncomment this line if you haven't completed the Foursquare API lab
import folium # map rendering library

print('Libraries imported.')
```

```
Collecting package metadata: done  
Solving environment: done
```

```
==> WARNING: A newer version of conda exists. <==  
  current version: 4.6.14  
  latest version: 4.7.5
```

Please update conda by running

```
$ conda update -n base -c defaults conda
```

```
# All requested packages already installed.
```

```
Collecting package metadata: done  
Solving environment: done
```

```
==> WARNING: A newer version of conda exists. <==  
  current version: 4.6.14  
  latest version: 4.7.5
```

Please update conda by running

```
$ conda update -n base -c defaults conda
```

```
# All requested packages already installed.
```

```
Libraries imported.
```

2.Data Understanding and Preparation

In []:

In [21]:

```
!wget -q -O 'newyork_data.json' https://cocl.us/new_york_dataset  
print('Data downloaded!')
```

Data downloaded!

In [22]:

```
with open('newyork_data.json') as json_data:  
    newyork_data = json.load(json_data)
```

In [23]:

```
newyork_data
```

Out[23]:

```
{'type': 'FeatureCollection',
 'totalFeatures': 306,
 'features': [{ 'type': 'Feature',
  'id': 'nyu_2451_34572.1',
  'geometry': { 'type': 'Point',
   'coordinates': [-73.84720052054902, 40.89470517661] },
  'geometry_name': 'geom',
  'properties': { 'name': 'Wakefield',
   'stacked': 1,
   'annoline1': 'Wakefield',
   'annoline2': None,
   'annoline3': None,
   'annoangle': 0.0,
   'borough': 'Bronx',
   'bbox': [-73.84720052054902,
    40.89470517661,
    -73.84720052054902,
    40.89470517661] } },
 { 'type': 'Feature',
  'id': 'nyu_2451_34572.2',
  'geometry': { 'type': 'Point',
   'coordinates': [-73.82993910812398, 40.87429419303012] },
  'geometry_name': 'geom',
  'properties': { 'name': 'Co-op City',
   'stacked': 2,
   'annoline1': 'Co-op',
   'annoline2': 'City',
   'annoline3': None,
   'annoangle': 0.0,
   'borough': 'Bronx',
   'bbox': [-73.82993910812398,
    40.87429419303012,
    -73.82993910812398,
    40.87429419303012] } },
 { 'type': 'Feature',
  'id': 'nyu_2451_34572.3',
  'geometry': { 'type': 'Point',
   'coordinates': [-73.82780644716412, 40.887555677350775] },
  'geometry_name': 'geom',
  'properties': { 'name': 'Eastchester',
   'stacked': 1,
   'annoline1': 'Eastchester',
   'annoline2': None,
   'annoline3': None,
   'annoangle': 0.0,
   'borough': 'Bronx',
   'bbox': [-73.82780644716412,
    40.887555677350775,
    -73.82780644716412,
    40.887555677350775] } },
 { 'type': 'Feature',
  'id': 'nyu_2451_34572.4',
  'geometry': { 'type': 'Point',
   'coordinates': [-73.90564259591682, 40.89543742690383] },
  'geometry_name': 'geom',
```

```
'properties': {'name': 'Fieldston',
'stacked': 1,
'annoline1': 'Fieldston',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.90564259591682,
40.89543742690383,
-73.90564259591682,
40.89543742690383]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.5',
'geometry': {'type': 'Point',
'coordinates': [-73.9125854610857, 40.890834493891305]}},
'geometry_name': 'geom',
'properties': {'name': 'Riverdale',
'stacked': 1,
'annoline1': 'Riverdale',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.9125854610857,
40.890834493891305,
-73.9125854610857,
40.890834493891305]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.6',
'geometry': {'type': 'Point',
'coordinates': [-73.90281798724604, 40.88168737120521]}},
'geometry_name': 'geom',
'properties': {'name': 'Kingsbridge',
'stacked': 1,
'annoline1': 'Kingsbridge',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.90281798724604,
40.88168737120521,
-73.90281798724604,
40.88168737120521]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.7',
'geometry': {'type': 'Point',
'coordinates': [-73.91065965862981, 40.87655077879964]}},
'geometry_name': 'geom',
'properties': {'name': 'Marble Hill',
'stacked': 2,
'annoline1': 'Marble',
'annoline2': 'Hill',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.91065965862981,
40.87655077879964,
```



```
-73.91065965862981,  
40.87655077879964]]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.8',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.86731496814176, 40.89827261213805]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Woodlawn',  
 'stacked': 1,  
 'annoline1': 'Woodlawn',  
 'annoline2': None,  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Bronx',  
 'bbox': [-73.86731496814176,  
 40.89827261213805,  
 -73.86731496814176,  
 40.89827261213805]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.9',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.8793907395681, 40.87722415599446]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Norwood',  
 'stacked': 1,  
 'annoline1': 'Norwood',  
 'annoline2': None,  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Bronx',  
 'bbox': [-73.8793907395681,  
 40.87722415599446,  
 -73.8793907395681,  
 40.87722415599446]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.10',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.85744642974207, 40.88103887819211]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Williamsbridge',  
 'stacked': 1,  
 'annoline1': 'Williamsbridge',  
 'annoline2': None,  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Bronx',  
 'bbox': [-73.85744642974207,  
 40.88103887819211,  
 -73.85744642974207,  
 40.88103887819211]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.11',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.83579759808117, 40.866858107252696]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Baychester',  
 'stacked': 1,
```

```

'annoline1': 'Baychester',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.83579759808117,
40.866858107252696,
-73.83579759808117,
40.866858107252696]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.12',
'geometry': {'type': 'Point',
'coordinates': [-73.85475564017999, 40.85741349808865]}},
'geometry_name': 'geom',
'properties': {'name': 'Pelham Parkway',
'stacked': 1,
'annoline1': 'Pelham Parkway',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.85475564017999,
40.85741349808865,
-73.85475564017999,
40.85741349808865]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.13',
'geometry': {'type': 'Point',
'coordinates': [-73.78648845267413, 40.84724670491813]}},
'geometry_name': 'geom',
'properties': {'name': 'City Island',
'stacked': 2,
'annoline1': 'City',
'annoline2': 'Island',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.78648845267413,
40.84724670491813,
-73.78648845267413,
40.84724670491813]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.14',
'geometry': {'type': 'Point',
'coordinates': [-73.8855121841913, 40.870185164975325]}},
'geometry_name': 'geom',
'properties': {'name': 'Bedford Park',
'stacked': 2,
'annoline1': 'Bedford',
'annoline2': 'Park',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.8855121841913,
40.870185164975325,
-73.8855121841913,
40.870185164975325]}},

```

```
{'type': 'Feature',
  'id': 'nyu_2451_34572.15',
  'geometry': {'type': 'Point',
    'coordinates': [-73.9104159619131, 40.85572707719664]},
  'geometry_name': 'geom',
  'properties': {'name': 'University Heights',
    'stacked': 2,
    'annoline1': 'University',
    'annoline2': 'Heights',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Bronx',
    'bbox': [-73.9104159619131,
      40.85572707719664,
      -73.9104159619131,
      40.85572707719664]}},
{'type': 'Feature',
  'id': 'nyu_2451_34572.16',
  'geometry': {'type': 'Point',
    'coordinates': [-73.91967159119565, 40.84789792606271]},
  'geometry_name': 'geom',
  'properties': {'name': 'Morris Heights',
    'stacked': 2,
    'annoline1': 'Morris',
    'annoline2': 'Heights',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Bronx',
    'bbox': [-73.91967159119565,
      40.84789792606271,
      -73.91967159119565,
      40.84789792606271]}},
{'type': 'Feature',
  'id': 'nyu_2451_34572.17',
  'geometry': {'type': 'Point',
    'coordinates': [-73.89642655981623, 40.86099679638654]},
  'geometry_name': 'geom',
  'properties': {'name': 'Fordham',
    'stacked': 1,
    'annoline1': 'Fordham',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Bronx',
    'bbox': [-73.89642655981623,
      40.86099679638654,
      -73.89642655981623,
      40.86099679638654]}},
{'type': 'Feature',
  'id': 'nyu_2451_34572.18',
  'geometry': {'type': 'Point',
    'coordinates': [-73.88735617532338, 40.84269615786053]},
  'geometry_name': 'geom',
  'properties': {'name': 'East Tremont',
    'stacked': 2,
    'annoline1': 'East',
    'annoline2': 'Tremont',
```

```
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.88735617532338,
40.84269615786053,
-73.88735617532338,
40.84269615786053]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.19',
'geometry': {'type': 'Point',
'coordinates': [-73.87774474910545, 40.83947505672653]}},
'geometry_name': 'geom',
'properties': {'name': 'West Farms',
'stacked': 2,
'annoline1': 'West',
'annoline2': 'Farms',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.87774474910545,
40.83947505672653,
-73.87774474910545,
40.83947505672653]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.20',
'geometry': {'type': 'Point',
'coordinates': [-73.9261020935813, 40.836623010706056]}},
'geometry_name': 'geom',
'properties': {'name': 'High Bridge',
'stacked': 1,
'annoline1': 'Highbridge',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.9261020935813,
40.836623010706056,
-73.9261020935813,
40.836623010706056]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.21',
'geometry': {'type': 'Point',
'coordinates': [-73.90942160757436, 40.819754370594936]}},
'geometry_name': 'geom',
'properties': {'name': 'Melrose',
'stacked': 1,
'annoline1': 'Melrose',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.90942160757436,
40.819754370594936,
-73.90942160757436,
40.819754370594936]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.22',
```

```

'geometry': {'type': 'Point',
'coordinates': [-73.91609987487575, 40.80623874935177]}},
'geometry_name': 'geom',
'properties': {'name': 'Mott Haven',
'stacked': 1,
'annoline1': 'Mott Haven',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.91609987487575,
40.80623874935177,
-73.91609987487575,
40.80623874935177]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.23',
'geometry': {'type': 'Point',
'coordinates': [-73.91322139386135, 40.801663627756206]}},
'geometry_name': 'geom',
'properties': {'name': 'Port Morris',
'stacked': 2,
'annoline1': 'Port',
'annoline2': 'Morris',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.91322139386135,
40.801663627756206,
-73.91322139386135,
40.801663627756206]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.24',
'geometry': {'type': 'Point',
'coordinates': [-73.8957882009446, 40.81509904545822]}},
'geometry_name': 'geom',
'properties': {'name': 'Longwood',
'stacked': 1,
'annoline1': 'Longwood',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.8957882009446,
40.81509904545822,
-73.8957882009446,
40.81509904545822]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.25',
'geometry': {'type': 'Point',
'coordinates': [-73.88331505955291, 40.80972987938709]}},
'geometry_name': 'geom',
'properties': {'name': 'Hunts Point',
'stacked': 2,
'annoline1': 'Hunts',
'annoline2': 'Point',
'annoline3': None,
'annoangle': 0.0,

```

```
'borough': 'Bronx',
'bbox': [-73.88331505955291,
40.80972987938709,
-73.88331505955291,
40.80972987938709]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.26',
'geometry': {'type': 'Point',
'coordinates': [-73.90150648943059, 40.82359198585534]},
'geometry_name': 'geom',
'properties': {'name': 'Morrisania',
'stacked': 1,
'annoline1': 'Morrisania',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.90150648943059,
40.82359198585534,
-73.90150648943059,
40.82359198585534]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.27',
'geometry': {'type': 'Point',
'coordinates': [-73.86574609554924, 40.821012197914015]},
'geometry_name': 'geom',
'properties': {'name': 'Soundview',
'stacked': 1,
'annoline1': 'Soundview',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.86574609554924,
40.821012197914015,
-73.86574609554924,
40.821012197914015]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.28',
'geometry': {'type': 'Point',
'coordinates': [-73.85414416189266, 40.80655112003589]},
'geometry_name': 'geom',
'properties': {'name': 'Clason Point',
'stacked': 2,
'annoline1': 'Clason',
'annoline2': 'Point',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.85414416189266,
40.80655112003589,
-73.85414416189266,
40.80655112003589]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.29',
'geometry': {'type': 'Point',
'coordinates': [-73.81635002158441, 40.81510925804005]},
```

```
'geometry_name': 'geom',
'properties': {'name': 'Throgs Neck',
'stacked': 1,
'annoline1': 'Throgs Neck',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.81635002158441,
40.81510925804005,
-73.81635002158441,
40.81510925804005]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.30',
'geometry': {'type': 'Point',
'coordinates': [-73.8240992675385, 40.844245936947374]}},
'geometry_name': 'geom',
'properties': {'name': 'Country Club',
'stacked': 2,
'annoline1': 'Country',
'annoline2': 'Club',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.8240992675385,
40.844245936947374,
-73.8240992675385,
40.844245936947374]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.31',
'geometry': {'type': 'Point',
'coordinates': [-73.85600310535783, 40.837937822267286]}},
'geometry_name': 'geom',
'properties': {'name': 'Parkchester',
'stacked': 1,
'annoline1': 'Parkchester',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.85600310535783,
40.837937822267286,
-73.85600310535783,
40.837937822267286]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.32',
'geometry': {'type': 'Point',
'coordinates': [-73.84219407604444, 40.8406194964327]}},
'geometry_name': 'geom',
'properties': {'name': 'Westchester Square',
'stacked': 2,
'annoline1': 'Westchester',
'annoline2': 'Square',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.84219407604444,
```

```
40.8406194964327,  
-73.84219407604444,  
40.8406194964327]]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.33',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.8662991807561, 40.84360847124718]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Van Nest',  
 'stacked': 2,  
 'annoline1': 'Van',  
 'annoline2': 'Nest',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Bronx',  
 'bbox': [-73.8662991807561,  
 40.84360847124718,  
 -73.8662991807561,  
 40.84360847124718]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.34',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.85040178030421, 40.847549063536334]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Morris Park',  
 'stacked': 1,  
 'annoline1': 'Morris Park',  
 'annoline2': None,  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Bronx',  
 'bbox': [-73.85040178030421,  
 40.847549063536334,  
 -73.85040178030421,  
 40.847549063536334]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.35',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.88845196134804, 40.85727710073895]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Belmont',  
 'stacked': 1,  
 'annoline1': 'Belmont',  
 'annoline2': None,  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Bronx',  
 'bbox': [-73.88845196134804,  
 40.85727710073895,  
 -73.88845196134804,  
 40.85727710073895]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.36',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.91719048210393, 40.88139497727086]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Spuyten Duyvil',
```



```

    'stacked': 2,
    'annoline1': 'Spuyten',
    'annoline2': 'Duyvil',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Bronx',
    'bbox': [-73.91719048210393,
    40.88139497727086,
    -73.91719048210393,
    40.88139497727086]}},
  {'type': 'Feature',
   'id': 'nyu_2451_34572.37',
   'geometry': {'type': 'Point',
    'coordinates': [-73.90453054908927, 40.90854282950666]}},
   'geometry_name': 'geom',
   'properties': {'name': 'North Riverdale',
    'stacked': 2,
    'annoline1': 'North',
    'annoline2': 'Riverdale',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Bronx',
    'bbox': [-73.90453054908927,
    40.90854282950666,
    -73.90453054908927,
    40.90854282950666]}},
  {'type': 'Feature',
   'id': 'nyu_2451_34572.38',
   'geometry': {'type': 'Point',
    'coordinates': [-73.8320737824047, 40.85064140940335]}},
   'geometry_name': 'geom',
   'properties': {'name': 'Pelham Bay',
    'stacked': 2,
    'annoline1': 'Pelham',
    'annoline2': 'Bay',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Bronx',
    'bbox': [-73.8320737824047,
    40.85064140940335,
    -73.8320737824047,
    40.85064140940335]}},
  {'type': 'Feature',
   'id': 'nyu_2451_34572.39',
   'geometry': {'type': 'Point',
    'coordinates': [-73.82620275994073, 40.82657951686922]}},
   'geometry_name': 'geom',
   'properties': {'name': 'Schuylerville',
    'stacked': 1,
    'annoline1': 'Schuylerville',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Bronx',
    'bbox': [-73.82620275994073,
    40.82657951686922,
    -73.82620275994073,

```

```
40.82657951686922]]}},  
{'type': 'Feature',  
  'id': 'nyu_2451_34572.40',  
  'geometry': {'type': 'Point',  
    'coordinates': [-73.81388514428619, 40.821986118163494]}},  
  'geometry_name': 'geom',  
  'properties': {'name': 'Edgewater Park',  
    'stacked': 2,  
    'annoline1': 'Edgewater',  
    'annoline2': 'Park',  
    'annoline3': None,  
    'annoangle': 0.0,  
    'borough': 'Bronx',  
    'bbox': [-73.81388514428619,  
      40.821986118163494,  
      -73.81388514428619,  
      40.821986118163494]}},  
{'type': 'Feature',  
  'id': 'nyu_2451_34572.41',  
  'geometry': {'type': 'Point',  
    'coordinates': [-73.84802729582735, 40.819014376988314]}},  
  'geometry_name': 'geom',  
  'properties': {'name': 'Castle Hill',  
    'stacked': 2,  
    'annoline1': 'Castle',  
    'annoline2': 'Hill',  
    'annoline3': None,  
    'annoangle': 0.0,  
    'borough': 'Bronx',  
    'bbox': [-73.84802729582735,  
      40.819014376988314,  
      -73.84802729582735,  
      40.819014376988314]}},  
{'type': 'Feature',  
  'id': 'nyu_2451_34572.42',  
  'geometry': {'type': 'Point',  
    'coordinates': [-73.86332361652777, 40.87137078192371]}},  
  'geometry_name': 'geom',  
  'properties': {'name': 'Olinville',  
    'stacked': 1,  
    'annoline1': 'Olinville',  
    'annoline2': None,  
    'annoline3': None,  
    'annoangle': 0.0,  
    'borough': 'Bronx',  
    'bbox': [-73.86332361652777,  
      40.87137078192371,  
      -73.86332361652777,  
      40.87137078192371]}},  
{'type': 'Feature',  
  'id': 'nyu_2451_34572.43',  
  'geometry': {'type': 'Point',  
    'coordinates': [-73.84161194831223, 40.86296562477998]}},  
  'geometry_name': 'geom',  
  'properties': {'name': 'Pelham Gardens',  
    'stacked': 2,  
    'annoline1': 'Pelham',
```

```

    'annoline2': 'Gardens',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Bronx',
    'bbox': [-73.84161194831223,
    40.86296562477998,
    -73.84161194831223,
    40.86296562477998]}},
  {'type': 'Feature',
   'id': 'nyu_2451_34572.44',
   'geometry': {'type': 'Point',
    'coordinates': [-73.91558941773444, 40.83428380733851]}},
   'geometry_name': 'geom',
   'properties': {'name': 'Concourse',
    'stacked': 1,
    'annoline1': 'Concourse',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Bronx',
    'bbox': [-73.91558941773444,
    40.83428380733851,
    -73.91558941773444,
    40.83428380733851]}},
  {'type': 'Feature',
   'id': 'nyu_2451_34572.45',
   'geometry': {'type': 'Point',
    'coordinates': [-73.85053524451935, 40.82977429787161]}},
   'geometry_name': 'geom',
   'properties': {'name': 'Unionport',
    'stacked': 1,
    'annoline1': 'Unionport',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Bronx',
    'bbox': [-73.85053524451935,
    40.82977429787161,
    -73.85053524451935,
    40.82977429787161]}},
  {'type': 'Feature',
   'id': 'nyu_2451_34572.46',
   'geometry': {'type': 'Point',
    'coordinates': [-73.84808271877168, 40.88456130303732]}},
   'geometry_name': 'geom',
   'properties': {'name': 'Edenwald',
    'stacked': 1,
    'annoline1': 'Edenwald',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Bronx',
    'bbox': [-73.84808271877168,
    40.88456130303732,
    -73.84808271877168,
    40.88456130303732]}},
  {'type': 'Feature',

```

```

'id': 'nyu_2451_34572.47',
'geometry': {'type': 'Point',
'coordinates': [-74.03062069353813, 40.625801065010656]},
'geometry_name': 'geom',
'properties': {'name': 'Bay Ridge',
'stacked': 1,
'annoline1': 'Bay Ridge',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-74.03062069353813,
40.625801065010656,
-74.03062069353813,
40.625801065010656]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.48',
'geometry': {'type': 'Point',
'coordinates': [-73.99517998380729, 40.61100890202044]},
'geometry_name': 'geom',
'properties': {'name': 'Bensonhurst',
'stacked': 1,
'annoline1': 'Bensonhurst',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.99517998380729,
40.61100890202044,
-73.99517998380729,
40.61100890202044]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.49',
'geometry': {'type': 'Point',
'coordinates': [-74.01031618527784, 40.64510294925429]},
'geometry_name': 'geom',
'properties': {'name': 'Sunset Park',
'stacked': 2,
'annoline1': 'Sunset',
'annoline2': 'Park',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-74.01031618527784,
40.64510294925429,
-74.01031618527784,
40.64510294925429]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.50',
'geometry': {'type': 'Point',
'coordinates': [-73.95424093127393, 40.7302009848647]},
'geometry_name': 'geom',
'properties': {'name': 'Greenpoint',
'stacked': 1,
'annoline1': 'Greenpoint',
'annoline2': None,
'annoline3': None,

```

```
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.95424093127393,
40.7302009848647,
-73.95424093127393,
40.7302009848647]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.51',
'geometry': {'type': 'Point',
'coordinates': [-73.97347087708445, 40.59526001306593]},
'geometry_name': 'geom',
'properties': {'name': 'Gravesend',
'stacked': 1,
'annoline1': 'Gravesend',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.97347087708445,
40.59526001306593,
-73.97347087708445,
40.59526001306593]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.52',
'geometry': {'type': 'Point',
'coordinates': [-73.96509448785336, 40.57682506566604]},
'geometry_name': 'geom',
'properties': {'name': 'Brighton Beach',
'stacked': 2,
'annoline1': 'Brighton',
'annoline2': 'Beach',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.96509448785336,
40.57682506566604,
-73.96509448785336,
40.57682506566604]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.53',
'geometry': {'type': 'Point',
'coordinates': [-73.94318640482979, 40.58689012678384]},
'geometry_name': 'geom',
'properties': {'name': 'Sheepshead Bay',
'stacked': 2,
'annoline1': 'Sheepshead',
'annoline2': 'Bay',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.94318640482979,
40.58689012678384,
-73.94318640482979,
40.58689012678384]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.54',
'geometry': {'type': 'Point',
```

```

    'coordinates': [-73.95743840559939, 40.61443251335098]],
    'geometry_name': 'geom',
    'properties': {'name': 'Manhattan Terrace',
    'stacked': 2,
    'annoline1': 'Manhattan',
    'annoline2': 'Terrace',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',
    'bbox': [-73.95743840559939,
    40.61443251335098,
    -73.95743840559939,
    40.61443251335098]]},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.55',
    'geometry': {'type': 'Point',
    'coordinates': [-73.95840106533903, 40.63632589026677]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Flatbush',
    'stacked': 1,
    'annoline1': 'Flatbush',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',
    'bbox': [-73.95840106533903,
    40.63632589026677,
    -73.95840106533903,
    40.63632589026677]}},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.56',
    'geometry': {'type': 'Point',
    'coordinates': [-73.94329119073582, 40.67082917695294]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Crown Heights',
    'stacked': 2,
    'annoline1': 'Crown',
    'annoline2': 'Heights',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',
    'bbox': [-73.94329119073582,
    40.67082917695294,
    -73.94329119073582,
    40.67082917695294]}},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.57',
    'geometry': {'type': 'Point',
    'coordinates': [-73.93610256185836, 40.64171776668961]}},
    'geometry_name': 'geom',
    'properties': {'name': 'East Flatbush',
    'stacked': 1,
    'annoline1': 'East Flatbush',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',

```

```
'bbox': [-73.93610256185836,
40.64171776668961,
-73.93610256185836,
40.64171776668961]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.58',
'geometry': {'type': 'Point',
'coordinates': [-73.98042110559474, 40.642381958003526]},
'geometry_name': 'geom',
'properties': {'name': 'Kensington',
'stacked': 1,
'annoline1': 'Kensington',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.98042110559474,
40.642381958003526,
-73.98042110559474,
40.642381958003526]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.59',
'geometry': {'type': 'Point',
'coordinates': [-73.98007340430172, 40.65694583575104]},
'geometry_name': 'geom',
'properties': {'name': 'Windsor Terrace',
'stacked': 2,
'annoline1': 'Windsor',
'annoline2': 'Terrace',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.98007340430172,
40.65694583575104,
-73.98007340430172,
40.65694583575104]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.60',
'geometry': {'type': 'Point',
'coordinates': [-73.9648592426269, 40.676822262254724]},
'geometry_name': 'geom',
'properties': {'name': 'Prospect Heights',
'stacked': 2,
'annoline1': 'Prospect',
'annoline2': 'Heights',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.9648592426269,
40.676822262254724,
-73.9648592426269,
40.676822262254724]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.61',
'geometry': {'type': 'Point',
'coordinates': [-73.91023536176607, 40.66394994339755]},
'geometry_name': 'geom',
```

```
'properties': {'name': 'Brownsville',
'stacked': 1,
'annoline1': 'Brownsville',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.91023536176607,
40.66394994339755,
-73.91023536176607,
40.66394994339755]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.62',
'geometry': {'type': 'Point',
'coordinates': [-73.95811529220927, 40.70714439344251]}},
'geometry_name': 'geom',
'properties': {'name': 'Williamsburg',
'stacked': 1,
'annoline1': 'Williamsburg',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.95811529220927,
40.70714439344251,
-73.95811529220927,
40.70714439344251]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.63',
'geometry': {'type': 'Point',
'coordinates': [-73.92525797487045, 40.69811611017901]}},
'geometry_name': 'geom',
'properties': {'name': 'Bushwick',
'stacked': 1,
'annoline1': 'Bushwick',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.92525797487045,
40.69811611017901,
-73.92525797487045,
40.69811611017901]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.64',
'geometry': {'type': 'Point',
'coordinates': [-73.94178488690297, 40.687231607720456]}},
'geometry_name': 'geom',
'properties': {'name': 'Bedford Stuyvesant',
'stacked': 1,
'annoline1': 'Bedford Stuyvesant',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.94178488690297,
40.687231607720456,
```



```
-73.94178488690297,  
40.687231607720456]]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.65',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.99378225496424, 40.695863722724084]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Brooklyn Heights',  
 'stacked': 2,  
 'annoline1': 'Brooklyn',  
 'annoline2': 'Heights',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Brooklyn',  
 'bbox': [-73.99378225496424,  
 40.695863722724084,  
 -73.99378225496424,  
 40.695863722724084]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.66',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.99856139218463, 40.687919722485574]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Cobble Hill',  
 'stacked': 2,  
 'annoline1': 'Cobble',  
 'annoline2': 'Hill',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Brooklyn',  
 'bbox': [-73.99856139218463,  
 40.687919722485574,  
 -73.99856139218463,  
 40.687919722485574]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.67',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.99465372828006, 40.680540231076485]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Carroll Gardens',  
 'stacked': 2,  
 'annoline1': 'Carroll',  
 'annoline2': 'Gardens',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Brooklyn',  
 'bbox': [-73.99465372828006,  
 40.680540231076485,  
 -73.99465372828006,  
 40.680540231076485]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.68',  
 'geometry': {'type': 'Point',  
 'coordinates': [-74.0127589747356, 40.676253230250886]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Red Hook',  
 'stacked': 2,
```

```
'annoline1': 'Red',
'annoline2': 'Hook',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-74.0127589747356,
40.676253230250886,
-74.0127589747356,
40.676253230250886]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.69',
'geometry': {'type': 'Point',
'coordinates': [-73.99444087145339, 40.673931143187154]}},
'geometry_name': 'geom',
'properties': {'name': 'Gowanus',
'stacked': 1,
'annoline1': 'Gowanus',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.99444087145339,
40.673931143187154,
-73.99444087145339,
40.673931143187154]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.70',
'geometry': {'type': 'Point',
'coordinates': [-73.97290574369092, 40.68852726018977]}},
'geometry_name': 'geom',
'properties': {'name': 'Fort Greene',
'stacked': 2,
'annoline1': 'Fort',
'annoline2': 'Greene',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.97290574369092,
40.68852726018977,
-73.97290574369092,
40.68852726018977]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.71',
'geometry': {'type': 'Point',
'coordinates': [-73.97705030183924, 40.67232052268197]}},
'geometry_name': 'geom',
'properties': {'name': 'Park Slope',
'stacked': 2,
'annoline1': 'Park',
'annoline2': 'Slope',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.97705030183924,
40.67232052268197,
-73.97705030183924,
40.67232052268197]}},
```

```
{'type': 'Feature',
  'id': 'nyu_2451_34572.72',
  'geometry': {'type': 'Point',
    'coordinates': [-73.87661596457296, 40.68239101144211]},
  'geometry_name': 'geom',
  'properties': {'name': 'Cypress Hills',
    'stacked': 2,
    'annoline1': 'Cypress',
    'annoline2': 'Hills',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',
    'bbox': [-73.87661596457296,
      40.68239101144211,
      -73.87661596457296,
      40.68239101144211]}},
{'type': 'Feature',
  'id': 'nyu_2451_34572.73',
  'geometry': {'type': 'Point',
    'coordinates': [-73.88069863917366, 40.669925700847045]},
  'geometry_name': 'geom',
  'properties': {'name': 'East New York',
    'stacked': 1,
    'annoline1': 'East New York',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',
    'bbox': [-73.88069863917366,
      40.669925700847045,
      -73.88069863917366,
      40.669925700847045]}},
{'type': 'Feature',
  'id': 'nyu_2451_34572.74',
  'geometry': {'type': 'Point',
    'coordinates': [-73.87936970045875, 40.64758905230874]},
  'geometry_name': 'geom',
  'properties': {'name': 'Starrett City',
    'stacked': 2,
    'annoline1': 'Starrett',
    'annoline2': 'City',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',
    'bbox': [-73.87936970045875,
      40.64758905230874,
      -73.87936970045875,
      40.64758905230874]}},
{'type': 'Feature',
  'id': 'nyu_2451_34572.75',
  'geometry': {'type': 'Point',
    'coordinates': [-73.90209269778966, 40.63556432797428]},
  'geometry_name': 'geom',
  'properties': {'name': 'Canarsie',
    'stacked': 1,
    'annoline1': 'Canarsie',
    'annoline2': None,
```

```

    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',
    'bbox': [-73.90209269778966,
    40.63556432797428,
    -73.90209269778966,
    40.63556432797428]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.76',
'geometry': {'type': 'Point',
'coordinates': [-73.92911302644674, 40.630446043757466]},
'geometry_name': 'geom',
'properties': {'name': 'Flatlands',
'stacked': 1,
'annoline1': 'Flatlands',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.92911302644674,
40.630446043757466,
-73.92911302644674,
40.630446043757466]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.77',
'geometry': {'type': 'Point',
'coordinates': [-73.90818571777423, 40.606336421685626]},
'geometry_name': 'geom',
'properties': {'name': 'Mill Island',
'stacked': 2,
'annoline1': 'Mill',
'annoline2': 'Island',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.90818571777423,
40.606336421685626,
-73.90818571777423,
40.606336421685626]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.78',
'geometry': {'type': 'Point',
'coordinates': [-73.94353722891886, 40.57791350308657]},
'geometry_name': 'geom',
'properties': {'name': 'Manhattan Beach',
'stacked': 2,
'annoline1': 'Manhattan',
'annoline2': 'Beach',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.94353722891886,
40.57791350308657,
-73.94353722891886,
40.57791350308657]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.79',

```

```

'geometry': {'type': 'Point',
'coordinates': [-73.98868295821637, 40.57429256471601]},
'geometry_name': 'geom',
'properties': {'name': 'Coney Island',
'stacked': 1,
'annoline1': 'Coney Island',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.98868295821637,
40.57429256471601,
-73.98868295821637,
40.57429256471601]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.80',
'geometry': {'type': 'Point',
'coordinates': [-73.99875221443519, 40.59951870282238]},
'geometry_name': 'geom',
'properties': {'name': 'Bath Beach',
'stacked': 2,
'annoline1': 'Bath',
'annoline2': 'Beach',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.99875221443519,
40.59951870282238,
-73.99875221443519,
40.59951870282238]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.81',
'geometry': {'type': 'Point',
'coordinates': [-73.99049823044811, 40.633130512758015]},
'geometry_name': 'geom',
'properties': {'name': 'Borough Park',
'stacked': 2,
'annoline1': 'Borough',
'annoline2': 'Park',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.99049823044811,
40.633130512758015,
-73.99049823044811,
40.633130512758015]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.82',
'geometry': {'type': 'Point',
'coordinates': [-74.01931375636022, 40.619219457722636]},
'geometry_name': 'geom',
'properties': {'name': 'Dyker Heights',
'stacked': 2,
'annoline1': 'Dyker',
'annoline2': 'Heights',
'annoline3': None,
'annoangle': 0.0,

```

```

    'borough': 'Brooklyn',
    'bbox': [-74.01931375636022,
    40.619219457722636,
    -74.01931375636022,
    40.619219457722636]]},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.83',
    'geometry': {'type': 'Point',
    'coordinates': [-73.93010170691196, 40.590848433902046]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Gerritsen Beach',
    'stacked': 2,
    'annoline1': 'Gerritsen',
    'annoline2': 'Beach',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',
    'bbox': [-73.93010170691196,
    40.590848433902046,
    -73.93010170691196,
    40.590848433902046]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.84',
    'geometry': {'type': 'Point',
    'coordinates': [-73.93134404108497, 40.609747779894604]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Marine Park',
    'stacked': 1,
    'annoline1': 'Marine Park',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',
    'bbox': [-73.93134404108497,
    40.609747779894604,
    -73.93134404108497,
    40.609747779894604]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.85',
    'geometry': {'type': 'Point',
    'coordinates': [-73.96784306216367, 40.693229421881504]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Clinton Hill',
    'stacked': 2,
    'annoline1': 'Clinton',
    'annoline2': 'Hill',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',
    'bbox': [-73.96784306216367,
    40.693229421881504,
    -73.96784306216367,
    40.693229421881504]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.86',
    'geometry': {'type': 'Point',
    'coordinates': [-74.0078731120024, 40.57637537890224]}},

```

```
'geometry_name': 'geom',
'properties': {'name': 'Sea Gate',
'stacked': 2,
'annoline1': 'Sea',
'annoline2': 'Gate',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-74.0078731120024,
40.57637537890224,
-74.0078731120024,
40.57637537890224]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.87',
'geometry': {'type': 'Point',
'coordinates': [-73.98346337431099, 40.69084402109802]}},
'geometry_name': 'geom',
'properties': {'name': 'Downtown',
'stacked': 1,
'annoline1': 'Downtown',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.98346337431099,
40.69084402109802,
-73.98346337431099,
40.69084402109802]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.88',
'geometry': {'type': 'Point',
'coordinates': [-73.98374824115798, 40.685682912091444]}},
'geometry_name': 'geom',
'properties': {'name': 'Boerum Hill',
'stacked': 2,
'annoline1': 'Boerum',
'annoline2': 'Hill',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.98374824115798,
40.685682912091444,
-73.98374824115798,
40.685682912091444]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.89',
'geometry': {'type': 'Point',
'coordinates': [-73.95489867077713, 40.658420017469815]}},
'geometry_name': 'geom',
'properties': {'name': 'Prospect Lefferts Gardens',
'stacked': 3,
'annoline1': 'Prospect',
'annoline2': 'Lefferts',
'annoline3': 'Gardens',
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.95489867077713,
```

```
40.658420017469815,  
-73.95489867077713,  
40.658420017469815]]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.90',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.91306831787395, 40.678402554795355]},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Ocean Hill',  
 'stacked': 2,  
 'annoline1': 'Ocean',  
 'annoline2': 'Hill',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Brooklyn',  
 'bbox': [-73.91306831787395,  
 40.678402554795355,  
 -73.91306831787395,  
 40.678402554795355]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.91',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.86797598081334, 40.67856995727479]},  
 'geometry_name': 'geom',  
 'properties': {'name': 'City Line',  
 'stacked': 2,  
 'annoline1': 'City',  
 'annoline2': 'Line',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Brooklyn',  
 'bbox': [-73.86797598081334,  
 40.67856995727479,  
 -73.86797598081334,  
 40.67856995727479]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.92',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.89855633630317, 40.61514955045308]},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Bergen Beach',  
 'stacked': 2,  
 'annoline1': 'Bergen',  
 'annoline2': 'Beach',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Brooklyn',  
 'bbox': [-73.89855633630317,  
 40.61514955045308,  
 -73.89855633630317,  
 40.61514955045308]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.93',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.95759523489838, 40.62559589869843]},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Midwood',
```



```

    'stacked': 1,
    'annoline1': 'Midwood',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',
    'bbox': [-73.95759523489838,
    40.62559589869843,
    -73.95759523489838,
    40.62559589869843]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.94',
 'geometry': {'type': 'Point',
 'coordinates': [-73.96261316716048, 40.647008603185185]},
 'geometry_name': 'geom',
 'properties': {'name': 'Prospect Park South',
 'stacked': 2,
 'annoline1': 'Prospect',
 'annoline2': 'Park South',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Brooklyn',
 'bbox': [-73.96261316716048,
 40.647008603185185,
 -73.96261316716048,
 40.647008603185185]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.95',
 'geometry': {'type': 'Point',
 'coordinates': [-73.91607483951324, 40.62384524478419]},
 'geometry_name': 'geom',
 'properties': {'name': 'Georgetown',
 'stacked': 1,
 'annoline1': 'Georgetown',
 'annoline2': None,
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Brooklyn',
 'bbox': [-73.91607483951324,
 40.62384524478419,
 -73.91607483951324,
 40.62384524478419]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.96',
 'geometry': {'type': 'Point',
 'coordinates': [-73.93885815269195, 40.70849241041548]},
 'geometry_name': 'geom',
 'properties': {'name': 'East Williamsburg',
 'stacked': 2,
 'annoline1': 'East',
 'annoline2': 'Williamsburg',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Brooklyn',
 'bbox': [-73.93885815269195,
 40.70849241041548,
 -73.93885815269195,

```

```
40.70849241041548]]},
{'type': 'Feature',
 'id': 'nyu_2451_34572.97',
 'geometry': {'type': 'Point',
 'coordinates': [-73.95880857587582, 40.714822906532014]}},
 'geometry_name': 'geom',
 'properties': {'name': 'North Side',
 'stacked': 1,
 'annoline1': 'North Side',
 'annoline2': None,
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Brooklyn',
 'bbox': [-73.95880857587582,
 40.714822906532014,
 -73.95880857587582,
 40.714822906532014]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.98',
 'geometry': {'type': 'Point',
 'coordinates': [-73.95800095153331, 40.71086147265064]}},
 'geometry_name': 'geom',
 'properties': {'name': 'South Side',
 'stacked': 1,
 'annoline1': 'South Side',
 'annoline2': None,
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Brooklyn',
 'bbox': [-73.95800095153331,
 40.71086147265064,
 -73.95800095153331,
 40.71086147265064]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.99',
 'geometry': {'type': 'Point',
 'coordinates': [-73.96836678035541, 40.61305976667942]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Ocean Parkway',
 'stacked': 2,
 'annoline1': 'Ocean',
 'annoline2': 'Parkway',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Brooklyn',
 'bbox': [-73.96836678035541,
 40.61305976667942,
 -73.96836678035541,
 40.61305976667942]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.100',
 'geometry': {'type': 'Point',
 'coordinates': [-74.03197914537984, 40.61476812694226]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Fort Hamilton',
 'stacked': 2,
 'annoline1': 'Fort',
```

```

'annoline2': 'Hamilton',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-74.03197914537984,
40.61476812694226,
-74.03197914537984,
40.61476812694226]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.101',
'geometry': {'type': 'Point',
'coordinates': [-73.99427936255978, 40.71561842231432]},
'geometry_name': 'geom',
'properties': {'name': 'Chinatown',
'stacked': 1,
'annoline1': 'Chinatown',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.99427936255978,
40.71561842231432,
-73.99427936255978,
40.71561842231432]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.102',
'geometry': {'type': 'Point',
'coordinates': [-73.93690027985234, 40.85190252555305]},
'geometry_name': 'geom',
'properties': {'name': 'Washington Heights',
'stacked': 2,
'annoline1': 'Washington',
'annoline2': 'Heights',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.93690027985234,
40.85190252555305,
-73.93690027985234,
40.85190252555305]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.103',
'geometry': {'type': 'Point',
'coordinates': [-73.92121042203897, 40.86768396449915]},
'geometry_name': 'geom',
'properties': {'name': 'Inwood',
'stacked': 1,
'annoline1': 'Inwood',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.92121042203897,
40.86768396449915,
-73.92121042203897,
40.86768396449915]}},
{'type': 'Feature',

```

```

'id': 'nyu_2451_34572.104',
'geometry': {'type': 'Point',
'coordinates': [-73.94968791883366, 40.823604284811935]},
'geometry_name': 'geom',
'properties': {'name': 'Hamilton Heights',
'stacked': 2,
'annoline1': 'Hamilton',
'annoline2': 'Heights',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.94968791883366,
40.823604284811935,
-73.94968791883366,
40.823604284811935]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.105',
'geometry': {'type': 'Point',
'coordinates': [-73.9573853935188, 40.8169344294978]},
'geometry_name': 'geom',
'properties': {'name': 'Manhattanville',
'stacked': 2,
'annoline1': 'Manhattanville',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.9573853935188,
40.8169344294978,
-73.9573853935188,
40.8169344294978]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.106',
'geometry': {'type': 'Point',
'coordinates': [-73.94321112603905, 40.81597606742414]},
'geometry_name': 'geom',
'properties': {'name': 'Central Harlem',
'stacked': 2,
'annoline1': 'Central',
'annoline2': 'Harlem',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.94321112603905,
40.81597606742414,
-73.94321112603905,
40.81597606742414]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.107',
'geometry': {'type': 'Point',
'coordinates': [-73.94418223148524, 40.79224946663033]},
'geometry_name': 'geom',
'properties': {'name': 'East Harlem',
'stacked': 2,
'annoline1': 'East',
'annoline2': 'Harlem',
'annoline3': None,

```

```
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.94418223148524,
40.79224946663033,
-73.94418223148524,
40.79224946663033]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.108',
'geometry': {'type': 'Point',
'coordinates': [-73.96050763135, 40.775638573301805]},
'geometry_name': 'geom',
'properties': {'name': 'Upper East Side',
'stacked': 3,
'annoline1': 'Upper',
'annoline2': 'East',
'annoline3': 'Side',
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.96050763135,
40.775638573301805,
-73.96050763135,
40.775638573301805]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.109',
'geometry': {'type': 'Point',
'coordinates': [-73.94711784471826, 40.775929849884875]},
'geometry_name': 'geom',
'properties': {'name': 'Yorkville',
'stacked': 1,
'annoline1': 'Yorkville',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.94711784471826,
40.775929849884875,
-73.94711784471826,
40.775929849884875]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.110',
'geometry': {'type': 'Point',
'coordinates': [-73.9588596881376, 40.76811265828733]},
'geometry_name': 'geom',
'properties': {'name': 'Lenox Hill',
'stacked': 2,
'annoline1': 'Lenox',
'annoline2': 'Hill',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.9588596881376,
40.76811265828733,
-73.9588596881376,
40.76811265828733]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.111',
'geometry': {'type': 'Point',
```

```

    'coordinates': [-73.94916769227953, 40.76215960576283]},
    'geometry_name': 'geom',
    'properties': {'name': 'Roosevelt Island',
    'stacked': 1,
    'annoline1': 'Roosevelt Island',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 56,
    'borough': 'Manhattan',
    'bbox': [-73.94916769227953,
    40.76215960576283,
    -73.94916769227953,
    40.76215960576283]}},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.112',
    'geometry': {'type': 'Point',
    'coordinates': [-73.97705923630603, 40.787657998534854]},
    'geometry_name': 'geom',
    'properties': {'name': 'Upper West Side',
    'stacked': 3,
    'annoline1': 'Upper',
    'annoline2': 'West',
    'annoline3': 'Side',
    'annoangle': 0.0,
    'borough': 'Manhattan',
    'bbox': [-73.97705923630603,
    40.787657998534854,
    -73.97705923630603,
    40.787657998534854]}},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.113',
    'geometry': {'type': 'Point',
    'coordinates': [-73.98533777001262, 40.77352888942166]},
    'geometry_name': 'geom',
    'properties': {'name': 'Lincoln Square',
    'stacked': 2,
    'annoline1': 'Lincoln',
    'annoline2': 'Square',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Manhattan',
    'bbox': [-73.98533777001262,
    40.77352888942166,
    -73.98533777001262,
    40.77352888942166]}},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.114',
    'geometry': {'type': 'Point',
    'coordinates': [-73.99611936309479, 40.75910089146212]},
    'geometry_name': 'geom',
    'properties': {'name': 'Clinton',
    'stacked': 1,
    'annoline1': 'Clinton',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Manhattan',

```

```
'bbox': [-73.99611936309479,
40.75910089146212,
-73.99611936309479,
40.75910089146212]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.115',
'geometry': {'type': 'Point',
'coordinates': [-73.98166882730304, 40.75469110270623]},
'geometry_name': 'geom',
'properties': {'name': 'Midtown',
'stacked': 1,
'annoline1': 'Midtown',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.98166882730304,
40.75469110270623,
-73.98166882730304,
40.75469110270623]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.116',
'geometry': {'type': 'Point',
'coordinates': [-73.97833207924127, 40.748303077252174]},
'geometry_name': 'geom',
'properties': {'name': 'Murray Hill',
'stacked': 2,
'annoline1': 'Murray',
'annoline2': 'Hill',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.97833207924127,
40.748303077252174,
-73.97833207924127,
40.748303077252174]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.117',
'geometry': {'type': 'Point',
'coordinates': [-74.00311633472813, 40.744034706747975]},
'geometry_name': 'geom',
'properties': {'name': 'Chelsea',
'stacked': 1,
'annoline1': 'Chelsea',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-74.00311633472813,
40.744034706747975,
-74.00311633472813,
40.744034706747975]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.118',
'geometry': {'type': 'Point',
'coordinates': [-73.99991402945902, 40.72693288536128]},
'geometry_name': 'geom',
```

```
'properties': {'name': 'Greenwich Village',
'stacked': 2,
'annoline1': 'Greenwich',
'annoline2': 'Village',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.99991402945902,
40.72693288536128,
-73.99991402945902,
40.72693288536128]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.119',
'geometry': {'type': 'Point',
'coordinates': [-73.98222616506416, 40.727846777270244]}},
'geometry_name': 'geom',
'properties': {'name': 'East Village',
'stacked': 2,
'annoline1': 'East',
'annoline2': 'Village',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.98222616506416,
40.727846777270244,
-73.98222616506416,
40.727846777270244]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.120',
'geometry': {'type': 'Point',
'coordinates': [-73.98089031999291, 40.71780674892765]}},
'geometry_name': 'geom',
'properties': {'name': 'Lower East Side',
'stacked': 3,
'annoline1': 'Lower',
'annoline2': 'East',
'annoline3': 'Side',
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.98089031999291,
40.71780674892765,
-73.98089031999291,
40.71780674892765]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.121',
'geometry': {'type': 'Point',
'coordinates': [-74.01068328559087, 40.721521967443216]}},
'geometry_name': 'geom',
'properties': {'name': 'Tribeca',
'stacked': 1,
'annoline1': 'Tribeca',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-74.01068328559087,
40.721521967443216,
```



```
-74.01068328559087,  
40.721521967443216]]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.122',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.99730467208073, 40.71932379395907]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Little Italy',  
 'stacked': 2,  
 'annoline1': 'Little',  
 'annoline2': 'Italy',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Manhattan',  
 'bbox': [-73.99730467208073,  
 40.71932379395907,  
 -73.99730467208073,  
 40.71932379395907]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.123',  
 'geometry': {'type': 'Point',  
 'coordinates': [-74.00065666959759, 40.72218384131794]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Soho',  
 'stacked': 1,  
 'annoline1': 'Soho',  
 'annoline2': None,  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Manhattan',  
 'bbox': [-74.00065666959759,  
 40.72218384131794,  
 -74.00065666959759,  
 40.72218384131794]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.124',  
 'geometry': {'type': 'Point',  
 'coordinates': [-74.00617998126812, 40.73443393572434]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'West Village',  
 'stacked': 2,  
 'annoline1': 'West',  
 'annoline2': 'Village',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Manhattan',  
 'bbox': [-74.00617998126812,  
 40.73443393572434,  
 -74.00617998126812,  
 40.73443393572434]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.125',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.96428617740655, 40.797307041702865]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Manhattan Valley',  
 'stacked': 2,
```

```
'annoline1': 'Manhattan',
'annoline2': 'Valley',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.96428617740655,
40.797307041702865,
-73.96428617740655,
40.797307041702865]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.126',
'geometry': {'type': 'Point',
'coordinates': [-73.96389627905332, 40.807999738165826]},
'geometry_name': 'geom',
'properties': {'name': 'Morningside Heights',
'stacked': 2,
'annoline1': 'Morningside',
'annoline2': 'Heights',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.96389627905332,
40.807999738165826,
-73.96389627905332,
40.807999738165826]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.127',
'geometry': {'type': 'Point',
'coordinates': [-73.98137594833541, 40.737209832715]},
'geometry_name': 'geom',
'properties': {'name': 'Gramercy',
'stacked': 1,
'annoline1': 'Gramercy',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.98137594833541,
40.737209832715,
-73.98137594833541,
40.737209832715]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.128',
'geometry': {'type': 'Point',
'coordinates': [-74.01686930508617, 40.71193198394565]},
'geometry_name': 'geom',
'properties': {'name': 'Battery Park City',
'stacked': 3,
'annoline1': 'Battery',
'annoline2': 'Park',
'annoline3': 'City',
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-74.01686930508617,
40.71193198394565,
-74.01686930508617,
40.71193198394565]}},
```

```
{'type': 'Feature',
  'id': 'nyu_2451_34572.129',
  'geometry': {'type': 'Point',
    'coordinates': [-74.0106654452127, 40.70710710727048]},
  'geometry_name': 'geom',
  'properties': {'name': 'Financial District',
    'stacked': 2,
    'annoline1': 'Financial',
    'annoline2': 'District',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Manhattan',
    'bbox': [-74.0106654452127,
      40.70710710727048,
      -74.0106654452127,
      40.70710710727048]}},
{'type': 'Feature',
  'id': 'nyu_2451_34572.130',
  'geometry': {'type': 'Point',
    'coordinates': [-73.91565374304234, 40.76850859335492]},
  'geometry_name': 'geom',
  'properties': {'name': 'Astoria',
    'stacked': 1,
    'annoline1': 'Astoria',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.91565374304234,
      40.76850859335492,
      -73.91565374304234,
      40.76850859335492]}},
{'type': 'Feature',
  'id': 'nyu_2451_34572.131',
  'geometry': {'type': 'Point',
    'coordinates': [-73.90184166838284, 40.74634908860222]},
  'geometry_name': 'geom',
  'properties': {'name': 'Woodside',
    'stacked': 1,
    'annoline1': 'Woodside',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.90184166838284,
      40.74634908860222,
      -73.90184166838284,
      40.74634908860222]}},
{'type': 'Feature',
  'id': 'nyu_2451_34572.132',
  'geometry': {'type': 'Point',
    'coordinates': [-73.88282109164365, 40.75198138007367]},
  'geometry_name': 'geom',
  'properties': {'name': 'Jackson Heights',
    'stacked': 2,
    'annoline1': 'Jackson',
    'annoline2': 'Heights',
```

```
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.88282109164365,
40.75198138007367,
-73.88282109164365,
40.75198138007367]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.133',
'geometry': {'type': 'Point',
'coordinates': [-73.88165622288388, 40.744048505122024]}},
'geometry_name': 'geom',
'properties': {'name': 'Elmhurst',
'stacked': 1,
'annoline1': 'Elmhurst',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.88165622288388,
40.744048505122024,
-73.88165622288388,
40.744048505122024]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.134',
'geometry': {'type': 'Point',
'coordinates': [-73.8381376460028, 40.65422527738487]}},
'geometry_name': 'geom',
'properties': {'name': 'Howard Beach',
'stacked': 2,
'annoline1': 'Howard',
'annoline2': 'Beach',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.8381376460028,
40.65422527738487,
-73.8381376460028,
40.65422527738487]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.135',
'geometry': {'type': 'Point',
'coordinates': [-73.85682497345258, 40.74238175015667]}},
'geometry_name': 'geom',
'properties': {'name': 'Corona',
'stacked': 1,
'annoline1': 'Corona',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.85682497345258,
40.74238175015667,
-73.85682497345258,
40.74238175015667]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.136',
```

```

'geometry': {'type': 'Point',
'coordinates': [-73.84447500788983, 40.72526378216503]},
'geometry_name': 'geom',
'properties': {'name': 'Forest Hills',
'stacked': 2,
'annoline1': 'Forest',
'annoline2': 'Hills',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.84447500788983,
40.72526378216503,
-73.84447500788983,
40.72526378216503]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.137',
'geometry': {'type': 'Point',
'coordinates': [-73.82981905825703, 40.7051790354148]},
'geometry_name': 'geom',
'properties': {'name': 'Kew Gardens',
'stacked': 2,
'annoline1': 'Kew',
'annoline2': 'Gardens',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.82981905825703,
40.7051790354148,
-73.82981905825703,
40.7051790354148]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.138',
'geometry': {'type': 'Point',
'coordinates': [-73.83183321446887, 40.69794731471763]},
'geometry_name': 'geom',
'properties': {'name': 'Richmond Hill',
'stacked': 2,
'annoline1': 'Richmond',
'annoline2': 'Hill',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.83183321446887,
40.69794731471763,
-73.83183321446887,
40.69794731471763]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.139',
'geometry': {'type': 'Point',
'coordinates': [-73.83177300329582, 40.76445419697846]},
'geometry_name': 'geom',
'properties': {'name': 'Flushing',
'stacked': 1,
'annoline1': 'Flushing',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,

```

```
'borough': 'Queens',
'bbox': [-73.83177300329582,
40.76445419697846,
-73.83177300329582,
40.76445419697846]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.140',
'geometry': {'type': 'Point',
'coordinates': [-73.93920223915505, 40.75021734610528]}},
'geometry_name': 'geom',
'properties': {'name': 'Long Island City',
'stacked': 3,
'annoline1': 'Long',
'annoline2': 'Island',
'annoline3': 'City',
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.93920223915505,
40.75021734610528,
-73.93920223915505,
40.75021734610528]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.141',
'geometry': {'type': 'Point',
'coordinates': [-73.92691617561577, 40.74017628351924]}},
'geometry_name': 'geom',
'properties': {'name': 'Sunnyside',
'stacked': 1,
'annoline1': 'Sunnyside',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.92691617561577,
40.74017628351924,
-73.92691617561577,
40.74017628351924]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.142',
'geometry': {'type': 'Point',
'coordinates': [-73.86704147658772, 40.76407323883091]}},
'geometry_name': 'geom',
'properties': {'name': 'East Elmhurst',
'stacked': 2,
'annoline1': 'East',
'annoline2': 'Elmhurst',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.86704147658772,
40.76407323883091,
-73.86704147658772,
40.76407323883091]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.143',
'geometry': {'type': 'Point',
'coordinates': [-73.89621713626859, 40.725427374093606]}},
```

```

'geometry_name': 'geom',
'properties': {'name': 'Maspeth',
'stacked': 1,
'annoline1': 'Maspeth',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.89621713626859,
40.725427374093606,
-73.89621713626859,
40.725427374093606]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.144',
'geometry': {'type': 'Point',
'coordinates': [-73.90143517559589, 40.70832315613858]}},
'geometry_name': 'geom',
'properties': {'name': 'Ridgewood',
'stacked': 1,
'annoline1': 'Ridgewood',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.90143517559589,
40.70832315613858,
-73.90143517559589,
40.70832315613858]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.145',
'geometry': {'type': 'Point',
'coordinates': [-73.87074167435605, 40.70276242967838]}},
'geometry_name': 'geom',
'properties': {'name': 'Glendale',
'stacked': 1,
'annoline1': 'Glendale',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.87074167435605,
40.70276242967838,
-73.87074167435605,
40.70276242967838]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.146',
'geometry': {'type': 'Point',
'coordinates': [-73.8578268690537, 40.72897409480735]}},
'geometry_name': 'geom',
'properties': {'name': 'Rego Park',
'stacked': 1,
'annoline1': 'Rego Park',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.8578268690537,

```

```
40.72897409480735,  
-73.8578268690537,  
40.72897409480735]]},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.147',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.8581104655432, 40.68988687915789]},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Woodhaven',  
 'stacked': 1,  
 'annoline1': 'Woodhaven',  
 'annoline2': None,  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Queens',  
 'bbox': [-73.8581104655432,  
 40.68988687915789,  
 -73.8581104655432,  
 40.68988687915789]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.148',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.84320266173447, 40.680708468265415]},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Ozone Park',  
 'stacked': 1,  
 'annoline1': 'Ozone Park',  
 'annoline2': None,  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Queens',  
 'bbox': [-73.84320266173447,  
 40.680708468265415,  
 -73.84320266173447,  
 40.680708468265415]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.149',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.80986478649041, 40.66854957767195]},  
 'geometry_name': 'geom',  
 'properties': {'name': 'South Ozone Park',  
 'stacked': 2,  
 'annoline1': 'South',  
 'annoline2': 'Ozone Park',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Queens',  
 'bbox': [-73.80986478649041,  
 40.66854957767195,  
 -73.80986478649041,  
 40.66854957767195]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.150',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.84304528896125, 40.784902749260205]},  
 'geometry_name': 'geom',  
 'properties': {'name': 'College Point',
```



```

    'stacked': 2,
    'annoline1': 'College',
    'annoline2': 'Point',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.84304528896125,
    40.784902749260205,
    -73.84304528896125,
    40.784902749260205]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.151',
    'geometry': {'type': 'Point',
    'coordinates': [-73.81420216610863, 40.78129076602694]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Whitestone',
    'stacked': 1,
    'annoline1': 'Whitestone',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.81420216610863,
    40.78129076602694,
    -73.81420216610863,
    40.78129076602694]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.152',
    'geometry': {'type': 'Point',
    'coordinates': [-73.7742736306867, 40.76604063281064]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Bayside',
    'stacked': 1,
    'annoline1': 'Bayside',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.7742736306867,
    40.76604063281064,
    -73.7742736306867,
    40.76604063281064]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.153',
    'geometry': {'type': 'Point',
    'coordinates': [-73.79176243728061, 40.76172954903262]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Auburndale',
    'stacked': 1,
    'annoline1': 'Auburndale',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.79176243728061,
    40.76172954903262,
    -73.79176243728061,

```

```
40.76172954903262]]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.154',
 'geometry': {'type': 'Point',
 'coordinates': [-73.7388977558074, 40.7708261928267]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Little Neck',
 'stacked': 2,
 'annoline1': 'Little',
 'annoline2': 'Neck',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Queens',
 'bbox': [-73.7388977558074,
 40.7708261928267,
 -73.7388977558074,
 40.7708261928267]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.155',
 'geometry': {'type': 'Point',
 'coordinates': [-73.7424982072733, 40.76684609790763]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Douglaston',
 'stacked': 1,
 'annoline1': 'Douglaston',
 'annoline2': None,
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Queens',
 'bbox': [-73.7424982072733,
 40.76684609790763,
 -73.7424982072733,
 40.76684609790763]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.156',
 'geometry': {'type': 'Point',
 'coordinates': [-73.71548118999145, 40.74944079974332]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Glen Oaks',
 'stacked': 2,
 'annoline1': 'Glen',
 'annoline2': 'Oaks',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Queens',
 'bbox': [-73.71548118999145,
 40.74944079974332,
 -73.71548118999145,
 40.74944079974332]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.157',
 'geometry': {'type': 'Point',
 'coordinates': [-73.72012814826903, 40.72857318176675]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Bellerose',
 'stacked': 1,
 'annoline1': 'Bellerose',
```

```

    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.72012814826903,
    40.72857318176675,
    -73.72012814826903,
    40.72857318176675]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.158',
'geometry': {'type': 'Point',
'coordinates': [-73.82087764933566, 40.722578244228046]}},
'geometry_name': 'geom',
'properties': {'name': 'Kew Gardens Hills',
'stacked': 3,
'annoline1': 'Kew',
'annoline2': 'Gardens',
'annoline3': 'Hills',
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.82087764933566,
40.722578244228046,
-73.82087764933566,
40.722578244228046]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.159',
'geometry': {'type': 'Point',
'coordinates': [-73.78271337003264, 40.7343944653313]}},
'geometry_name': 'geom',
'properties': {'name': 'Fresh Meadows',
'stacked': 2,
'annoline1': 'Fresh',
'annoline2': 'Meadows',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.78271337003264,
40.7343944653313,
-73.78271337003264,
40.7343944653313]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.160',
'geometry': {'type': 'Point',
'coordinates': [-73.81174822458634, 40.71093547252271]}},
'geometry_name': 'geom',
'properties': {'name': 'Briarwood',
'stacked': 1,
'annoline1': 'Briarwood',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.81174822458634,
40.71093547252271,
-73.81174822458634,
40.71093547252271]}},
{'type': 'Feature',

```

```
'id': 'nyu_2451_34572.161',
'geometry': {'type': 'Point',
'coordinates': [-73.79690165888289, 40.70465736068717]},
'geometry_name': 'geom',
'properties': {'name': 'Jamaica Center',
'stacked': 2,
'annoline1': 'Jamaica',
'annoline2': 'Center',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.79690165888289,
40.70465736068717,
-73.79690165888289,
40.70465736068717]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.162',
'geometry': {'type': 'Point',
'coordinates': [-73.75494976234332, 40.74561857141855]},
'geometry_name': 'geom',
'properties': {'name': 'Oakland Gardens',
'stacked': 2,
'annoline1': 'Oakland',
'annoline2': 'Gardens',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.75494976234332,
40.74561857141855,
-73.75494976234332,
40.74561857141855]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.163',
'geometry': {'type': 'Point',
'coordinates': [-73.73871484578424, 40.718893092167356]},
'geometry_name': 'geom',
'properties': {'name': 'Queens Village',
'stacked': 2,
'annoline1': 'Queens',
'annoline2': 'Village',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.73871484578424,
40.718893092167356,
-73.73871484578424,
40.718893092167356]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.164',
'geometry': {'type': 'Point',
'coordinates': [-73.75925009335594, 40.71124344191904]},
'geometry_name': 'geom',
'properties': {'name': 'Hollis',
'stacked': 1,
'annoline1': 'Hollis',
'annoline2': None,
'annoline3': None,
```

```
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.75925009335594,
40.71124344191904,
-73.75925009335594,
40.71124344191904]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.165',
'geometry': {'type': 'Point',
'coordinates': [-73.7904261313554, 40.696911253789885]},
'geometry_name': 'geom',
'properties': {'name': 'South Jamaica',
'stacked': 1,
'annoline1': 'South Jamaica',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.7904261313554,
40.696911253789885,
-73.7904261313554,
40.696911253789885]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.166',
'geometry': {'type': 'Point',
'coordinates': [-73.75867603727717, 40.69444538522359]},
'geometry_name': 'geom',
'properties': {'name': 'St. Albans',
'stacked': 1,
'annoline1': 'St. Albans',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.75867603727717,
40.69444538522359,
-73.75867603727717,
40.69444538522359]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.167',
'geometry': {'type': 'Point',
'coordinates': [-73.77258787620906, 40.67521139591733]},
'geometry_name': 'geom',
'properties': {'name': 'Rochdale',
'stacked': 1,
'annoline1': 'Rochdale',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.77258787620906,
40.67521139591733,
-73.77258787620906,
40.67521139591733]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.168',
'geometry': {'type': 'Point',
```

```

    'coordinates': [-73.76042092682287, 40.666230490368584]},
    'geometry_name': 'geom',
    'properties': {'name': 'Springfield Gardens',
    'stacked': 2,
    'annoline1': 'Springfield',
    'annoline2': 'Gardens',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.76042092682287,
    40.666230490368584,
    -73.76042092682287,
    40.666230490368584]}},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.169',
    'geometry': {'type': 'Point',
    'coordinates': [-73.73526873708026, 40.692774639160845]},
    'geometry_name': 'geom',
    'properties': {'name': 'Cambria Heights',
    'stacked': 2,
    'annoline1': 'Cambria',
    'annoline2': 'Heights',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.73526873708026,
    40.692774639160845,
    -73.73526873708026,
    40.692774639160845]}},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.170',
    'geometry': {'type': 'Point',
    'coordinates': [-73.73526079428278, 40.659816433428084]},
    'geometry_name': 'geom',
    'properties': {'name': 'Rosedale',
    'stacked': 1,
    'annoline1': 'Rosedale',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.73526079428278,
    40.659816433428084,
    -73.73526079428278,
    40.659816433428084]}},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.171',
    'geometry': {'type': 'Point',
    'coordinates': [-73.75497968043872, 40.603134432500894]},
    'geometry_name': 'geom',
    'properties': {'name': 'Far Rockaway',
    'stacked': 2,
    'annoline1': 'Far Rockaway',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',

```

```

    'bbox': [-73.75497968043872,
    40.603134432500894,
    -73.75497968043872,
    40.603134432500894]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.172',
'geometry': {'type': 'Point',
'coordinates': [-73.8200548911032, 40.60302658351238]},
'geometry_name': 'geom',
'properties': {'name': 'Broad Channel',
'stacked': 2,
'annoline1': 'Broad',
'annoline2': 'Channel',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.8200548911032,
40.60302658351238,
-73.8200548911032,
40.60302658351238]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.173',
'geometry': {'type': 'Point',
'coordinates': [-73.92551196994168, 40.55740128845452]},
'geometry_name': 'geom',
'properties': {'name': 'Breezy Point',
'stacked': 2,
'annoline1': 'Breezy',
'annoline2': 'Point',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.92551196994168,
40.55740128845452,
-73.92551196994168,
40.55740128845452]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.174',
'geometry': {'type': 'Point',
'coordinates': [-73.90228960391673, 40.775923015642896]},
'geometry_name': 'geom',
'properties': {'name': 'Steinway',
'stacked': 1,
'annoline1': 'Steinway',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.90228960391673,
40.775923015642896,
-73.90228960391673,
40.775923015642896]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.175',
'geometry': {'type': 'Point',
'coordinates': [-73.80436451720988, 40.79278140360048]},
'geometry_name': 'geom',

```

```

'properties': {'name': 'Beechhurst',
'stacked': 1,
'annoline1': 'Beechhurst',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.80436451720988,
40.79278140360048,
-73.80436451720988,
40.79278140360048]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.176',
'geometry': {'type': 'Point',
'coordinates': [-73.7768022262158, 40.782842806245554]}},
'geometry_name': 'geom',
'properties': {'name': 'Bay Terrace',
'stacked': 2,
'annoline1': 'Bay',
'annoline2': 'Terrace',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.7768022262158,
40.782842806245554,
-73.7768022262158,
40.782842806245554]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.177',
'geometry': {'type': 'Point',
'coordinates': [-73.77613282391705, 40.595641807368494]}},
'geometry_name': 'geom',
'properties': {'name': 'Edgemere',
'stacked': 1,
'annoline1': 'Edgemere',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.77613282391705,
40.595641807368494,
-73.77613282391705,
40.595641807368494]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.178',
'geometry': {'type': 'Point',
'coordinates': [-73.79199233136943, 40.58914394372971]}},
'geometry_name': 'geom',
'properties': {'name': 'Arverne',
'stacked': 1,
'annoline1': 'Arverne',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.79199233136943,
40.58914394372971,

```



```
-73.79199233136943,  
40.58914394372971]]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.179',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.82236121088751, 40.582801696845586]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Rockaway Beach',  
 'stacked': 2,  
 'annoline1': 'Rockaway',  
 'annoline2': 'Beach',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Queens',  
 'bbox': [-73.82236121088751,  
 40.582801696845586,  
 -73.82236121088751,  
 40.582801696845586]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.180',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.85754672410827, 40.572036730217015]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Neponsit',  
 'stacked': 1,  
 'annoline1': 'Neponsit',  
 'annoline2': None,  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Queens',  
 'bbox': [-73.85754672410827,  
 40.572036730217015,  
 -73.85754672410827,  
 40.572036730217015]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.181',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.81276269135866, 40.764126122614066]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Murray Hill',  
 'stacked': 2,  
 'annoline1': 'Murray',  
 'annoline2': 'Hill',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Queens',  
 'bbox': [-73.81276269135866,  
 40.764126122614066,  
 -73.81276269135866,  
 40.764126122614066]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.182',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.70884705889246, 40.741378421945434]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Floral Park',  
 'stacked': 1,
```

```

'annoline1': 'Floral Park',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.70884705889246,
40.741378421945434,
-73.70884705889246,
40.741378421945434]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.183',
'geometry': {'type': 'Point',
'coordinates': [-73.76714166714729, 40.7209572076444]}},
'geometry_name': 'geom',
'properties': {'name': 'Holliswood',
'stacked': 1,
'annoline1': 'Holliswood',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.76714166714729,
40.7209572076444,
-73.76714166714729,
40.7209572076444]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.184',
'geometry': {'type': 'Point',
'coordinates': [-73.7872269693666, 40.71680483014613]}},
'geometry_name': 'geom',
'properties': {'name': 'Jamaica Estates',
'stacked': 2,
'annoline1': 'Jamaica',
'annoline2': 'Estates',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.7872269693666,
40.71680483014613,
-73.7872269693666,
40.71680483014613]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.185',
'geometry': {'type': 'Point',
'coordinates': [-73.82580915110559, 40.7445723092867]}},
'geometry_name': 'geom',
'properties': {'name': 'Queensboro Hill',
'stacked': 2,
'annoline1': 'Queensboro',
'annoline2': 'Hill',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.82580915110559,
40.7445723092867,
-73.82580915110559,
40.7445723092867]}},

```

```
{'type': 'Feature',
 'id': 'nyu_2451_34572.186',
 'geometry': {'type': 'Point',
 'coordinates': [-73.79760300912672, 40.723824901829204]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Hillcrest',
 'stacked': 1,
 'annoline1': 'Hillcrest',
 'annoline2': None,
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Queens',
 'bbox': [-73.79760300912672,
 40.723824901829204,
 -73.79760300912672,
 40.723824901829204]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.187',
 'geometry': {'type': 'Point',
 'coordinates': [-73.93157506072878, 40.761704526054146]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Ravenswood',
 'stacked': 1,
 'annoline1': 'Ravenswood',
 'annoline2': None,
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Queens',
 'bbox': [-73.93157506072878,
 40.761704526054146,
 -73.93157506072878,
 40.761704526054146]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.188',
 'geometry': {'type': 'Point',
 'coordinates': [-73.84963782402441, 40.66391841925139]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Lindenwood',
 'stacked': 1,
 'annoline1': 'Lindenwood',
 'annoline2': None,
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Queens',
 'bbox': [-73.84963782402441,
 40.66391841925139,
 -73.84963782402441,
 40.66391841925139]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.189',
 'geometry': {'type': 'Point',
 'coordinates': [-73.74025607989822, 40.66788389660247]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Laurelton',
 'stacked': 1,
 'annoline1': 'Laurelton',
 'annoline2': None,
```

```
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.74025607989822,
40.66788389660247,
-73.74025607989822,
40.66788389660247]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.190',
'geometry': {'type': 'Point',
'coordinates': [-73.8625247141374, 40.736074570830795]},
'geometry_name': 'geom',
'properties': {'name': 'Lefrak City',
'stacked': 2,
'annoline1': 'Lefrak',
'annoline2': 'City',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.8625247141374,
40.736074570830795,
-73.8625247141374,
40.736074570830795]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.191',
'geometry': {'type': 'Point',
'coordinates': [-73.8540175039252, 40.57615556543109]},
'geometry_name': 'geom',
'properties': {'name': 'Belle Harbor',
'stacked': 1,
'annoline1': 'Belle Harbor',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.8540175039252,
40.57615556543109,
-73.8540175039252,
40.57615556543109]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.192',
'geometry': {'type': 'Point',
'coordinates': [-73.84153370226186, 40.58034295646131]},
'geometry_name': 'geom',
'properties': {'name': 'Rockaway Park',
'stacked': 1,
'annoline1': 'Rockaway Park',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.84153370226186,
40.58034295646131,
-73.84153370226186,
40.58034295646131]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.193',
```

```

'geometry': {'type': 'Point',
'coordinates': [-73.79664750844047, 40.59771061565768]},
'geometry_name': 'geom',
'properties': {'name': 'Somerville',
'stacked': 1,
'annoline1': 'Somerville',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.79664750844047,
40.59771061565768,
-73.79664750844047,
40.59771061565768]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.194',
'geometry': {'type': 'Point',
'coordinates': [-73.75175310731153, 40.66000322733613]},
'geometry_name': 'geom',
'properties': {'name': 'Brookville',
'stacked': 1,
'annoline1': 'Brookville',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.75175310731153,
40.66000322733613,
-73.75175310731153,
40.66000322733613]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.195',
'geometry': {'type': 'Point',
'coordinates': [-73.73889198912481, 40.73301404027834]},
'geometry_name': 'geom',
'properties': {'name': 'Bellaire',
'stacked': 1,
'annoline1': 'Bellaire',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.73889198912481,
40.73301404027834,
-73.73889198912481,
40.73301404027834]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.196',
'geometry': {'type': 'Point',
'coordinates': [-73.85751790676447, 40.7540709990489]},
'geometry_name': 'geom',
'properties': {'name': 'North Corona',
'stacked': 2,
'annoline1': 'North',
'annoline2': 'Corona',
'annoline3': None,
'annoangle': 0.0,

```

```
'borough': 'Queens',
'bbox': [-73.85751790676447,
40.7540709990489,
-73.85751790676447,
40.7540709990489]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.197',
'geometry': {'type': 'Point',
'coordinates': [-73.8410221123401, 40.7146110815117]}},
'geometry_name': 'geom',
'properties': {'name': 'Forest Hills Gardens',
'stacked': 3,
'annoline1': 'Forest',
'annoline2': 'Hills',
'annoline3': 'Gardens',
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.8410221123401,
40.7146110815117,
-73.8410221123401,
40.7146110815117]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.198',
'geometry': {'type': 'Point',
'coordinates': [-74.07935312512797, 40.6449815710044]}},
'geometry_name': 'geom',
'properties': {'name': 'St. George',
'stacked': 2,
'annoline1': 'St.',
'annoline2': 'George',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.07935312512797,
40.6449815710044,
-74.07935312512797,
40.6449815710044]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.199',
'geometry': {'type': 'Point',
'coordinates': [-74.08701650516625, 40.64061455913511]}},
'geometry_name': 'geom',
'properties': {'name': 'New Brighton',
'stacked': 2,
'annoline1': 'New',
'annoline2': 'Brighton',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.08701650516625,
40.64061455913511,
-74.08701650516625,
40.64061455913511]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.200',
'geometry': {'type': 'Point',
'coordinates': [-74.07790192660066, 40.62692762538176]}},
```

```
'geometry_name': 'geom',
'properties': {'name': 'Stapleton',
'stacked': 1,
'annoline1': 'Stapleton',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.07790192660066,
40.62692762538176,
-74.07790192660066,
40.62692762538176]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.201',
'geometry': {'type': 'Point',
'coordinates': [-74.06980526716141, 40.61530494652761]}},
'geometry_name': 'geom',
'properties': {'name': 'Rosebank',
'stacked': 1,
'annoline1': 'Rosebank',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.06980526716141,
40.61530494652761,
-74.06980526716141,
40.61530494652761]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.202',
'geometry': {'type': 'Point',
'coordinates': [-74.1071817826561, 40.63187892654607]}},
'geometry_name': 'geom',
'properties': {'name': 'West Brighton',
'stacked': 2,
'annoline1': 'West',
'annoline2': 'Brighton',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.1071817826561,
40.63187892654607,
-74.1071817826561,
40.63187892654607]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.203',
'geometry': {'type': 'Point',
'coordinates': [-74.08724819983729, 40.624184791313006]}},
'geometry_name': 'geom',
'properties': {'name': 'Grymes Hill',
'stacked': 2,
'annoline1': 'Grymes',
'annoline2': 'Hill',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.08724819983729,
```

```
40.624184791313006,  
-74.08724819983729,  
40.624184791313006]]},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.204',  
 'geometry': {'type': 'Point',  
 'coordinates': [-74.1113288180088, 40.59706851814673]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Todt Hill',  
 'stacked': 2,  
 'annoline1': 'Todt',  
 'annoline2': 'Hill',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Staten Island',  
 'bbox': [-74.1113288180088,  
 40.59706851814673,  
 -74.1113288180088,  
 40.59706851814673]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.205',  
 'geometry': {'type': 'Point',  
 'coordinates': [-74.0795529253982, 40.58024741350956]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'South Beach',  
 'stacked': 2,  
 'annoline1': 'South',  
 'annoline2': 'Beach',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Staten Island',  
 'bbox': [-74.0795529253982,  
 40.58024741350956,  
 -74.0795529253982,  
 40.58024741350956]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.206',  
 'geometry': {'type': 'Point',  
 'coordinates': [-74.12943426797008, 40.63366930554365]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Port Richmond',  
 'stacked': 2,  
 'annoline1': 'Port',  
 'annoline2': 'Richmond',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Staten Island',  
 'bbox': [-74.12943426797008,  
 40.63366930554365,  
 -74.12943426797008,  
 40.63366930554365]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.207',  
 'geometry': {'type': 'Point',  
 'coordinates': [-74.15008537046981, 40.632546390481124]}},  
 'geometry_name': 'geom',  
 'properties': {'name': "Mariner's Harbor",
```



```

    'stacked': 2,
    'annoline1': "Mariner's",
    'annoline2': 'Harbor',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Staten Island',
    'bbox': [-74.15008537046981,
    40.632546390481124,
    -74.15008537046981,
    40.632546390481124]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.208',
    'geometry': {'type': 'Point',
      'coordinates': [-74.17464532993542, 40.63968297845542]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Port Ivory',
      'stacked': 2,
      'annoline1': 'Port',
      'annoline2': 'Ivory',
      'annoline3': None,
      'annoangle': 0.0,
      'borough': 'Staten Island',
      'bbox': [-74.17464532993542,
      40.63968297845542,
      -74.17464532993542,
      40.63968297845542]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.209',
    'geometry': {'type': 'Point',
      'coordinates': [-74.11918058534842, 40.61333593766742]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Castleton Corners',
      'stacked': 2,
      'annoline1': 'Castleton',
      'annoline2': 'Corners',
      'annoline3': None,
      'annoangle': 0.0,
      'borough': 'Staten Island',
      'bbox': [-74.11918058534842,
      40.61333593766742,
      -74.11918058534842,
      40.61333593766742]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.210',
    'geometry': {'type': 'Point',
      'coordinates': [-74.16496031329827, 40.594252379161695]}},
    'geometry_name': 'geom',
    'properties': {'name': 'New Springville',
      'stacked': 2,
      'annoline1': 'New',
      'annoline2': 'Springville',
      'annoline3': None,
      'annoangle': 0.0,
      'borough': 'Staten Island',
      'bbox': [-74.16496031329827,
      40.594252379161695,
      -74.16496031329827,

```

```
40.594252379161695]]},
{'type': 'Feature',
 'id': 'nyu_2451_34572.211',
 'geometry': {'type': 'Point',
 'coordinates': [-74.19073717538116, 40.58631375103281]},
 'geometry_name': 'geom',
 'properties': {'name': 'Travis',
 'stacked': 1,
 'annoline1': 'Travis',
 'annoline2': None,
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Staten Island',
 'bbox': [-74.19073717538116,
 40.58631375103281,
 -74.19073717538116,
 40.58631375103281]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.212',
 'geometry': {'type': 'Point',
 'coordinates': [-74.1164794360638, 40.57257231820632]},
 'geometry_name': 'geom',
 'properties': {'name': 'New Dorp',
 'stacked': 2,
 'annoline1': 'New',
 'annoline2': 'Dorp',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Staten Island',
 'bbox': [-74.1164794360638,
 40.57257231820632,
 -74.1164794360638,
 40.57257231820632]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.213',
 'geometry': {'type': 'Point',
 'coordinates': [-74.12156593771896, 40.5584622432888]},
 'geometry_name': 'geom',
 'properties': {'name': 'Oakwood',
 'stacked': 1,
 'annoline1': 'Oakwood',
 'annoline2': None,
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Staten Island',
 'bbox': [-74.12156593771896,
 40.5584622432888,
 -74.12156593771896,
 40.5584622432888]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.214',
 'geometry': {'type': 'Point',
 'coordinates': [-74.14932381490992, 40.549480228713605]},
 'geometry_name': 'geom',
 'properties': {'name': 'Great Kills',
 'stacked': 2,
 'annoline1': 'Great',
```

```
'annoline2': 'Kills',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.14932381490992,
40.549480228713605,
-74.14932381490992,
40.549480228713605]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.215',
'geometry': {'type': 'Point',
'coordinates': [-74.1643308041936, 40.542230747450745]},
'geometry_name': 'geom',
'properties': {'name': 'Eltingville',
'stacked': 1,
'annoline1': 'Eltingville',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.1643308041936,
40.542230747450745,
-74.1643308041936,
40.542230747450745]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.216',
'geometry': {'type': 'Point',
'coordinates': [-74.17854866165878, 40.53811417474507]},
'geometry_name': 'geom',
'properties': {'name': 'Annadale',
'stacked': 1,
'annoline1': 'Annadale',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.17854866165878,
40.53811417474507,
-74.17854866165878,
40.53811417474507]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.217',
'geometry': {'type': 'Point',
'coordinates': [-74.20524582480326, 40.541967622888755]},
'geometry_name': 'geom',
'properties': {'name': 'Woodrow',
'stacked': 1,
'annoline1': 'Woodrow',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.20524582480326,
40.541967622888755,
-74.20524582480326,
40.541967622888755]}},
{'type': 'Feature',
```

```

'id': 'nyu_2451_34572.218',
'geometry': {'type': 'Point',
'coordinates': [-74.24656934235283, 40.50533376115642]}},
'geometry_name': 'geom',
'properties': {'name': 'Tottenville',
'stacked': 1,
'annoline1': 'Tottenville',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.24656934235283,
40.50533376115642,
-74.24656934235283,
40.50533376115642]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.219',
'geometry': {'type': 'Point',
'coordinates': [-74.08055351790115, 40.637316067110326]}},
'geometry_name': 'geom',
'properties': {'name': 'Tompkinsville',
'stacked': 1,
'annoline1': 'Tompkinsville',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.08055351790115,
40.637316067110326,
-74.08055351790115,
40.637316067110326]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.220',
'geometry': {'type': 'Point',
'coordinates': [-74.09629029235458, 40.61919310792676]}},
'geometry_name': 'geom',
'properties': {'name': 'Silver Lake',
'stacked': 2,
'annoline1': 'Silver',
'annoline2': 'Lake',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.09629029235458,
40.61919310792676,
-74.09629029235458,
40.61919310792676]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.221',
'geometry': {'type': 'Point',
'coordinates': [-74.0971255217853, 40.61276015756489]}},
'geometry_name': 'geom',
'properties': {'name': 'Sunnyside',
'stacked': 1,
'annoline1': 'Sunnyside',
'annoline2': None,
'annoline3': None,

```

```
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.0971255217853,
40.61276015756489,
-74.0971255217853,
40.61276015756489]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.222',
'geometry': {'type': 'Point',
'coordinates': [-73.96101312466779, 40.643675183340974]}},
'geometry_name': 'geom',
'properties': {'name': 'Ditmas Park',
'stacked': 2,
'annoline1': 'Ditmas',
'annoline2': 'Park',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.96101312466779,
40.643675183340974,
-73.96101312466779,
40.643675183340974]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.223',
'geometry': {'type': 'Point',
'coordinates': [-73.93718680559314, 40.66094656188111]}},
'geometry_name': 'geom',
'properties': {'name': 'Wingate',
'stacked': 1,
'annoline1': 'Wingate',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.93718680559314,
40.66094656188111,
-73.93718680559314,
40.66094656188111]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.224',
'geometry': {'type': 'Point',
'coordinates': [-73.92688212616955, 40.655572313280764]}},
'geometry_name': 'geom',
'properties': {'name': 'Rugby',
'stacked': 1,
'annoline1': 'Rugby',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.92688212616955,
40.655572313280764,
-73.92688212616955,
40.655572313280764]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.225',
'geometry': {'type': 'Point',
```

```

    'coordinates': [-74.08015734936296, 40.60919044434558]},
    'geometry_name': 'geom',
    'properties': {'name': 'Park Hill',
    'stacked': 2,
    'annoline1': 'Park',
    'annoline2': 'Hill',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Staten Island',
    'bbox': [-74.08015734936296,
    40.60919044434558,
    -74.08015734936296,
    40.60919044434558]}},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.226',
    'geometry': {'type': 'Point',
    'coordinates': [-74.13304143951704, 40.62109047275409]},
    'geometry_name': 'geom',
    'properties': {'name': 'Westerleigh',
    'stacked': 1,
    'annoline1': 'Westerleigh',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Staten Island',
    'bbox': [-74.13304143951704,
    40.62109047275409,
    -74.13304143951704,
    40.62109047275409]}},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.227',
    'geometry': {'type': 'Point',
    'coordinates': [-74.15315246387762, 40.620171512231884]},
    'geometry_name': 'geom',
    'properties': {'name': 'Graniteville',
    'stacked': 1,
    'annoline1': 'Graniteville',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Staten Island',
    'bbox': [-74.15315246387762,
    40.620171512231884,
    -74.15315246387762,
    40.620171512231884]}},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.228',
    'geometry': {'type': 'Point',
    'coordinates': [-74.16510420241124, 40.63532509911492]},
    'geometry_name': 'geom',
    'properties': {'name': 'Arlington',
    'stacked': 1,
    'annoline1': 'Arlington',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Staten Island',

```

```
'bbox': [-74.16510420241124,
40.63532509911492,
-74.16510420241124,
40.63532509911492]]},
{'type': 'Feature',
'id': 'nyu_2451_34572.229',
'geometry': {'type': 'Point',
'coordinates': [-74.06712363225574, 40.596312571276734]},
'geometry_name': 'geom',
'properties': {'name': 'Arrochar',
'stacked': 1,
'annoline1': 'Arrochar',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.06712363225574,
40.596312571276734,
-74.06712363225574,
40.596312571276734]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.230',
'geometry': {'type': 'Point',
'coordinates': [-74.0766743627905, 40.59826835959991]},
'geometry_name': 'geom',
'properties': {'name': 'Grasmere',
'stacked': 1,
'annoline1': 'Grasmere',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.0766743627905,
40.59826835959991,
-74.0766743627905,
40.59826835959991]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.231',
'geometry': {'type': 'Point',
'coordinates': [-74.08751118005578, 40.59632891379513]},
'geometry_name': 'geom',
'properties': {'name': 'Old Town',
'stacked': 2,
'annoline1': 'Old',
'annoline2': 'Town',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.08751118005578,
40.59632891379513,
-74.08751118005578,
40.59632891379513]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.232',
'geometry': {'type': 'Point',
'coordinates': [-74.09639905312521, 40.588672948199275]},
'geometry_name': 'geom',
```

```

'properties': {'name': 'Dongan Hills',
'stacked': 2,
'annoline1': 'Dongan',
'annoline2': 'Hills',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.09639905312521,
40.588672948199275,
-74.09639905312521,
40.588672948199275]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.233',
'geometry': {'type': 'Point',
'coordinates': [-74.09348266303591, 40.57352690574283]}},
'geometry_name': 'geom',
'properties': {'name': 'Midland Beach',
'stacked': 2,
'annoline1': 'Midland',
'annoline2': 'Beach',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.09348266303591,
40.57352690574283,
-74.09348266303591,
40.57352690574283]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.234',
'geometry': {'type': 'Point',
'coordinates': [-74.10585598545434, 40.57621558711788]}},
'geometry_name': 'geom',
'properties': {'name': 'Grant City',
'stacked': 2,
'annoline1': 'Grant',
'annoline2': 'City',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.10585598545434,
40.57621558711788,
-74.10585598545434,
40.57621558711788]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.235',
'geometry': {'type': 'Point',
'coordinates': [-74.10432707469124, 40.56425549307335]}},
'geometry_name': 'geom',
'properties': {'name': 'New Dorp Beach',
'stacked': 3,
'annoline1': 'New',
'annoline2': 'Dorp',
'annoline3': 'Beach',
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.10432707469124,
40.56425549307335,

```



```
-74.10432707469124,  
40.56425549307335]]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.236',  
 'geometry': {'type': 'Point',  
 'coordinates': [-74.13916622175768, 40.55398800858462]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Bay Terrace',  
 'stacked': 2,  
 'annoline1': 'Bay',  
 'annoline2': 'Terrace',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Staten Island',  
 'bbox': [-74.13916622175768,  
 40.55398800858462,  
 -74.13916622175768,  
 40.55398800858462]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.237',  
 'geometry': {'type': 'Point',  
 'coordinates': [-74.19174105747814, 40.531911920489605]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Huguenot',  
 'stacked': 1,  
 'annoline1': 'Huguenot',  
 'annoline2': None,  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Staten Island',  
 'bbox': [-74.19174105747814,  
 40.531911920489605,  
 -74.19174105747814,  
 40.531911920489605]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.238',  
 'geometry': {'type': 'Point',  
 'coordinates': [-74.21983106616777, 40.524699376118136]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Pleasant Plains',  
 'stacked': 2,  
 'annoline1': 'Pleasant',  
 'annoline2': 'Plains',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Staten Island',  
 'bbox': [-74.21983106616777,  
 40.524699376118136,  
 -74.21983106616777,  
 40.524699376118136]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.239',  
 'geometry': {'type': 'Point',  
 'coordinates': [-74.22950350260027, 40.50608165346305]}},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Butler Manor',  
 'stacked': 2,
```

```

'annoline1': 'Butler',
'annoline2': 'Manor',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.22950350260027,
40.50608165346305,
-74.22950350260027,
40.50608165346305]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.240',
'geometry': {'type': 'Point',
'coordinates': [-74.23215775896526, 40.53053148283314]}},
'geometry_name': 'geom',
'properties': {'name': 'Charleston',
'stacked': 1,
'annoline1': 'Charleston',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.23215775896526,
40.53053148283314,
-74.23215775896526,
40.53053148283314]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.241',
'geometry': {'type': 'Point',
'coordinates': [-74.21572851113952, 40.54940400650072]}},
'geometry_name': 'geom',
'properties': {'name': 'Rossville',
'stacked': 1,
'annoline1': 'Rossville',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.21572851113952,
40.54940400650072,
-74.21572851113952,
40.54940400650072]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.242',
'geometry': {'type': 'Point',
'coordinates': [-74.18588674583893, 40.54928582278321]}},
'geometry_name': 'geom',
'properties': {'name': 'Arden Heights',
'stacked': 2,
'annoline1': 'Arden',
'annoline2': 'Heights',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.18588674583893,
40.54928582278321,
-74.18588674583893,
40.54928582278321]}},

```

```
{'type': 'Feature',
  'id': 'nyu_2451_34572.243',
  'geometry': {'type': 'Point',
    'coordinates': [-74.17079414786092, 40.555295236173194]},
  'geometry_name': 'geom',
  'properties': {'name': 'Greenridge',
    'stacked': 1,
    'annoline1': 'Greenridge',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Staten Island',
    'bbox': [-74.17079414786092,
      40.555295236173194,
      -74.17079414786092,
      40.555295236173194]}},
{'type': 'Feature',
  'id': 'nyu_2451_34572.244',
  'geometry': {'type': 'Point',
    'coordinates': [-74.15902208156601, 40.58913894875281]},
  'geometry_name': 'geom',
  'properties': {'name': 'Heartland Village',
    'stacked': 2,
    'annoline1': 'Heartland',
    'annoline2': 'Village',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Staten Island',
    'bbox': [-74.15902208156601,
      40.58913894875281,
      -74.15902208156601,
      40.58913894875281]}},
{'type': 'Feature',
  'id': 'nyu_2451_34572.245',
  'geometry': {'type': 'Point',
    'coordinates': [-74.1895604551969, 40.59472602746295]},
  'geometry_name': 'geom',
  'properties': {'name': 'Chelsea',
    'stacked': 1,
    'annoline1': 'Chelsea',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Staten Island',
    'bbox': [-74.1895604551969,
      40.59472602746295,
      -74.1895604551969,
      40.59472602746295]}},
{'type': 'Feature',
  'id': 'nyu_2451_34572.246',
  'geometry': {'type': 'Point',
    'coordinates': [-74.18725638381567, 40.60577868452358]},
  'geometry_name': 'geom',
  'properties': {'name': 'Bloomfield',
    'stacked': 1,
    'annoline1': 'Bloomfield',
    'annoline2': None,
```

```

    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Staten Island',
    'bbox': [-74.18725638381567,
    40.60577868452358,
    -74.18725638381567,
    40.60577868452358]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.247',
'geometry': {'type': 'Point',
'coordinates': [-74.15940948657122, 40.6095918004203]}},
'geometry_name': 'geom',
'properties': {'name': 'Bulls Head',
'stacked': 2,
'annoline1': 'Bulls',
'annoline2': 'Head',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.15940948657122,
40.6095918004203,
-74.15940948657122,
40.6095918004203]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.248',
'geometry': {'type': 'Point',
'coordinates': [-73.95325646837112, 40.7826825671257]}},
'geometry_name': 'geom',
'properties': {'name': 'Carnegie Hill',
'stacked': 2,
'annoline1': 'Carnegie',
'annoline2': 'Hill',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.95325646837112,
40.7826825671257,
-73.95325646837112,
40.7826825671257]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.249',
'geometry': {'type': 'Point',
'coordinates': [-73.98843368023597, 40.72325901885768]}},
'geometry_name': 'geom',
'properties': {'name': 'Noho',
'stacked': 1,
'annoline1': 'Noho',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.98843368023597,
40.72325901885768,
-73.98843368023597,
40.72325901885768]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.250',

```

```

'geometry': {'type': 'Point',
'coordinates': [-74.00541529873355, 40.71522892046282]},
'geometry_name': 'geom',
'properties': {'name': 'Civic Center',
'stacked': 2,
'annoline1': 'Civic',
'annoline2': 'Center',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-74.00541529873355,
40.71522892046282,
-74.00541529873355,
40.71522892046282]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.251',
'geometry': {'type': 'Point',
'coordinates': [-73.98871313285247, 40.7485096643122]},
'geometry_name': 'geom',
'properties': {'name': 'Midtown South',
'stacked': 2,
'annoline1': 'Midtown',
'annoline2': 'South',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.98871313285247,
40.7485096643122,
-73.98871313285247,
40.7485096643122]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.252',
'geometry': {'type': 'Point',
'coordinates': [-74.1340572986257, 40.56960594275505]},
'geometry_name': 'geom',
'properties': {'name': 'Richmond Town',
'stacked': 2,
'annoline1': 'Richmond',
'annoline2': 'Town',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.1340572986257,
40.56960594275505,
-74.1340572986257,
40.56960594275505]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.253',
'geometry': {'type': 'Point',
'coordinates': [-74.06667766061771, 40.60971934079284]},
'geometry_name': 'geom',
'properties': {'name': 'Shore Acres',
'stacked': 2,
'annoline1': 'Shore',
'annoline2': 'Acres',
'annoline3': None,
'annoangle': 0.0,

```

```

    'borough': 'Staten Island',
    'bbox': [-74.06667766061771,
    40.60971934079284,
    -74.06667766061771,
    40.60971934079284]]},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.254',
    'geometry': {'type': 'Point',
    'coordinates': [-74.072642445484, 40.61917845202843]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Clifton',
    'stacked': 1,
    'annoline1': 'Clifton',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Staten Island',
    'bbox': [-74.072642445484,
    40.61917845202843,
    -74.072642445484,
    40.61917845202843]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.255',
    'geometry': {'type': 'Point',
    'coordinates': [-74.08402364740358, 40.6044731896879]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Concord',
    'stacked': 1,
    'annoline1': 'Concord',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Staten Island',
    'bbox': [-74.08402364740358,
    40.6044731896879,
    -74.08402364740358,
    40.6044731896879]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.256',
    'geometry': {'type': 'Point',
    'coordinates': [-74.09776206972522, 40.606794394801]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Emerson Hill',
    'stacked': 2,
    'annoline1': 'Emerson',
    'annoline2': 'Hill',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Staten Island',
    'bbox': [-74.09776206972522,
    40.606794394801,
    -74.09776206972522,
    40.606794394801]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.257',
    'geometry': {'type': 'Point',
    'coordinates': [-74.09805062373887, 40.63563000681151]}},

```

```
'geometry_name': 'geom',
'properties': {'name': 'Randall Manor',
'stacked': 2,
'annoline1': 'Randall',
'annoline2': 'Manor',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.09805062373887,
40.63563000681151,
-74.09805062373887,
40.63563000681151]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.258',
'geometry': {'type': 'Point',
'coordinates': [-74.18622331749823, 40.63843283794795]}},
'geometry_name': 'geom',
'properties': {'name': 'Howland Hook',
'stacked': 2,
'annoline1': 'Howland',
'annoline2': 'Hook',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.18622331749823,
40.63843283794795,
-74.18622331749823,
40.63843283794795]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.259',
'geometry': {'type': 'Point',
'coordinates': [-74.1418167896889, 40.630146741193826]}},
'geometry_name': 'geom',
'properties': {'name': 'Elm Park',
'stacked': 2,
'annoline1': 'Elm',
'annoline2': 'Park',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.1418167896889,
40.630146741193826,
-74.1418167896889,
40.630146741193826]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.260',
'geometry': {'type': 'Point',
'coordinates': [-73.91665331978048, 40.652117451793494]}},
'geometry_name': 'geom',
'properties': {'name': 'Remsen Village',
'stacked': 2,
'annoline1': 'Remsen',
'annoline2': 'Village',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.91665331978048,
```

```
40.652117451793494,
-73.91665331978048,
40.652117451793494]]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.261',
 'geometry': {'type': 'Point',
 'coordinates': [-73.88511776379292, 40.6627442796966]}},
 'geometry_name': 'geom',
 'properties': {'name': 'New Lots',
 'stacked': 2,
 'annoline1': 'New',
 'annoline2': 'Lots',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Brooklyn',
 'bbox': [-73.88511776379292,
 40.6627442796966,
 -73.88511776379292,
 40.6627442796966]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.262',
 'geometry': {'type': 'Point',
 'coordinates': [-73.90233474295836, 40.63131755039667]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Paerdegat Basin',
 'stacked': 2,
 'annoline1': 'Paerdegat',
 'annoline2': 'Basin',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Brooklyn',
 'bbox': [-73.90233474295836,
 40.63131755039667,
 -73.90233474295836,
 40.63131755039667]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.263',
 'geometry': {'type': 'Point',
 'coordinates': [-73.91515391550404, 40.61597423962336]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Mill Basin',
 'stacked': 2,
 'annoline1': 'Mill',
 'annoline2': 'Basin',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Brooklyn',
 'bbox': [-73.91515391550404,
 40.61597423962336,
 -73.91515391550404,
 40.61597423962336]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.264',
 'geometry': {'type': 'Point',
 'coordinates': [-73.79646462081593, 40.71145964370482]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Jamaica Hills',
```



```

    'stacked': 2,
    'annoline1': 'Jamaica',
    'annoline2': 'Hills',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.79646462081593,
    40.71145964370482,
    -73.79646462081593,
    40.71145964370482]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.265',
    'geometry': {'type': 'Point',
      'coordinates': [-73.79671678028349, 40.73350025429757]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Utopia',
      'stacked': 1,
      'annoline1': 'Utopia',
      'annoline2': None,
      'annoline3': None,
      'annoangle': 0.0,
      'borough': 'Queens',
      'bbox': [-73.79671678028349,
      40.73350025429757,
      -73.79671678028349,
      40.73350025429757]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.266',
    'geometry': {'type': 'Point',
      'coordinates': [-73.80486120040537, 40.73493618075478]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Pomonok',
      'stacked': 1,
      'annoline1': 'Pomonok',
      'annoline2': None,
      'annoline3': None,
      'annoangle': 0.0,
      'borough': 'Queens',
      'bbox': [-73.80486120040537,
      40.73493618075478,
      -73.80486120040537,
      40.73493618075478]}},
  {'type': 'Feature',
    'id': 'nyu_2451_34572.267',
    'geometry': {'type': 'Point',
      'coordinates': [-73.89467996270574, 40.7703173929982]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Astoria Heights',
      'stacked': 2,
      'annoline1': 'Astoria',
      'annoline2': 'Heights',
      'annoline3': None,
      'annoangle': 0.0,
      'borough': 'Queens',
      'bbox': [-73.89467996270574,
      40.7703173929982,
      -73.89467996270574,

```

```
40.7703173929982]]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.268',
 'geometry': {'type': 'Point',
 'coordinates': [-73.90119903387667, 40.83142834161548]},
 'geometry_name': 'geom',
 'properties': {'name': 'Claremont Village',
 'stacked': 2,
 'annoline1': 'Claremont',
 'annoline2': 'Village',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Bronx',
 'bbox': [-73.90119903387667,
 40.83142834161548,
 -73.90119903387667,
 40.83142834161548]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.269',
 'geometry': {'type': 'Point',
 'coordinates': [-73.91584652759009, 40.824780490842905]},
 'geometry_name': 'geom',
 'properties': {'name': 'Concourse Village',
 'stacked': 2,
 'annoline1': 'Concourse',
 'annoline2': 'Village',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Bronx',
 'bbox': [-73.91584652759009,
 40.824780490842905,
 -73.91584652759009,
 40.824780490842905]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.270',
 'geometry': {'type': 'Point',
 'coordinates': [-73.91655551964419, 40.84382617671654]},
 'geometry_name': 'geom',
 'properties': {'name': 'Mount Eden',
 'stacked': 2,
 'annoline1': 'Mount',
 'annoline2': 'Eden',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Bronx',
 'bbox': [-73.91655551964419,
 40.84382617671654,
 -73.91655551964419,
 40.84382617671654]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.271',
 'geometry': {'type': 'Point',
 'coordinates': [-73.90829930881988, 40.84884160724665]},
 'geometry_name': 'geom',
 'properties': {'name': 'Mount Hope',
 'stacked': 2,
 'annoline1': 'Mount',
```

```

    'annoline2': 'Hope',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Bronx',
    'bbox': [-73.90829930881988,
    40.84884160724665,
    -73.90829930881988,
    40.84884160724665]}},
  {'type': 'Feature',
   'id': 'nyu_2451_34572.272',
   'geometry': {'type': 'Point',
    'coordinates': [-73.96355614094303, 40.76028033131374]}},
   'geometry_name': 'geom',
   'properties': {'name': 'Sutton Place',
    'stacked': 2,
    'annoline1': 'Sutton',
    'annoline2': 'Place',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Manhattan',
    'bbox': [-73.96355614094303,
    40.76028033131374,
    -73.96355614094303,
    40.76028033131374]}},
  {'type': 'Feature',
   'id': 'nyu_2451_34572.273',
   'geometry': {'type': 'Point',
    'coordinates': [-73.95386782130745, 40.743414090073536]}},
   'geometry_name': 'geom',
   'properties': {'name': 'Hunters Point',
    'stacked': 2,
    'annoline1': 'Hunters',
    'annoline2': 'Point',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.95386782130745,
    40.743414090073536,
    -73.95386782130745,
    40.743414090073536]}},
  {'type': 'Feature',
   'id': 'nyu_2451_34572.274',
   'geometry': {'type': 'Point',
    'coordinates': [-73.96770824581834, 40.75204236950722]}},
   'geometry_name': 'geom',
   'properties': {'name': 'Turtle Bay',
    'stacked': 2,
    'annoline1': 'Turtle',
    'annoline2': 'Bay',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Manhattan',
    'bbox': [-73.96770824581834,
    40.75204236950722,
    -73.96770824581834,
    40.75204236950722]}},
  {'type': 'Feature',

```

```

'id': 'nyu_2451_34572.275',
'geometry': {'type': 'Point',
'coordinates': [-73.97121928722265, 40.746917410740195]},
'geometry_name': 'geom',
'properties': {'name': 'Tudor City',
'stacked': 2,
'annoline1': 'Tudor',
'annoline2': 'City',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.97121928722265,
40.746917410740195,
-73.97121928722265,
40.746917410740195]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.276',
'geometry': {'type': 'Point',
'coordinates': [-73.97405170469203, 40.73099955477061]},
'geometry_name': 'geom',
'properties': {'name': 'Stuyvesant Town',
'stacked': 2,
'annoline1': 'Stuyvesant',
'annoline2': 'Town',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.97405170469203,
40.73099955477061,
-73.97405170469203,
40.73099955477061]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.277',
'geometry': {'type': 'Point',
'coordinates': [-73.9909471052826, 40.739673047638426]},
'geometry_name': 'geom',
'properties': {'name': 'Flatiron',
'stacked': 1,
'annoline1': 'Flatiron',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Manhattan',
'bbox': [-73.9909471052826,
40.739673047638426,
-73.9909471052826,
40.739673047638426]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.278',
'geometry': {'type': 'Point',
'coordinates': [-73.91819286431682, 40.74565180608076]},
'geometry_name': 'geom',
'properties': {'name': 'Sunnyside Gardens',
'stacked': 2,
'annoline1': 'Sunnyside',
'annoline2': 'Gardens',
'annoline3': None,

```

```

    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.91819286431682,
    40.74565180608076,
    -73.91819286431682,
    40.74565180608076]]},
  {'type': 'Feature',
   'id': 'nyu_2451_34572.279',
   'geometry': {'type': 'Point',
    'coordinates': [-73.93244235260178, 40.73725071694497]}},
   'geometry_name': 'geom',
   'properties': {'name': 'Blissville',
    'stacked': 1,
    'annoline1': 'Blissville',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.93244235260178,
    40.73725071694497,
    -73.93244235260178,
    40.73725071694497]}},
  {'type': 'Feature',
   'id': 'nyu_2451_34572.280',
   'geometry': {'type': 'Point',
    'coordinates': [-73.99550751888415, 40.70328109093014]}},
   'geometry_name': 'geom',
   'properties': {'name': 'Fulton Ferry',
    'stacked': 2,
    'annoline1': 'Fulton',
    'annoline2': 'Ferry',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',
    'bbox': [-73.99550751888415,
    40.70328109093014,
    -73.99550751888415,
    40.70328109093014]}},
  {'type': 'Feature',
   'id': 'nyu_2451_34572.281',
   'geometry': {'type': 'Point',
    'coordinates': [-73.98111603592393, 40.70332149882874]}},
   'geometry_name': 'geom',
   'properties': {'name': 'Vinegar Hill',
    'stacked': 2,
    'annoline1': 'Vinegar',
    'annoline2': 'Hill',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Brooklyn',
    'bbox': [-73.98111603592393,
    40.70332149882874,
    -73.98111603592393,
    40.70332149882874]}},
  {'type': 'Feature',
   'id': 'nyu_2451_34572.282',
   'geometry': {'type': 'Point',

```

```
'coordinates': [-73.93053108817338, 40.67503986503237]],
'geometry_name': 'geom',
'properties': {'name': 'Weeksville',
'stacked': 1,
'annoline1': 'Weeksville',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.93053108817338,
40.67503986503237,
-73.93053108817338,
40.67503986503237]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.283',
'geometry': {'type': 'Point',
'coordinates': [-73.90331684852599, 40.67786104769531]},
'geometry_name': 'geom',
'properties': {'name': 'Broadway Junction',
'stacked': 2,
'annoline1': 'Broadway',
'annoline2': 'Junction',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.90331684852599,
40.67786104769531,
-73.90331684852599,
40.67786104769531]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.284',
'geometry': {'type': 'Point',
'coordinates': [-73.9887528074504, 40.70317632822692]},
'geometry_name': 'geom',
'properties': {'name': 'Dumbo',
'stacked': 1,
'annoline1': 'Dumbo',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.9887528074504,
40.70317632822692,
-73.9887528074504,
40.70317632822692]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.285',
'geometry': {'type': 'Point',
'coordinates': [-74.12059399718001, 40.60180957631444]},
'geometry_name': 'geom',
'properties': {'name': 'Manor Heights',
'stacked': 2,
'annoline1': 'Manor',
'annoline2': 'Heights',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
```

```

    'bbox': [-74.12059399718001,
    40.60180957631444,
    -74.12059399718001,
    40.60180957631444]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.286',
'geometry': {'type': 'Point',
'coordinates': [-74.13208447484298, 40.60370692627371]}},
'geometry_name': 'geom',
'properties': {'name': 'Willowbrook',
'stacked': 1,
'annoline1': 'Willowbrook',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.13208447484298,
40.60370692627371,
-74.13208447484298,
40.60370692627371]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.287',
'geometry': {'type': 'Point',
'coordinates': [-74.21776636068567, 40.541139922091766]}},
'geometry_name': 'geom',
'properties': {'name': 'Sandy Ground',
'stacked': 2,
'annoline1': 'Sandy',
'annoline2': 'Ground',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.21776636068567,
40.541139922091766,
-74.21776636068567,
40.541139922091766]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.288',
'geometry': {'type': 'Point',
'coordinates': [-74.12727240604946, 40.579118742961214]}},
'geometry_name': 'geom',
'properties': {'name': 'Egbertville',
'stacked': 1,
'annoline1': 'Egbertville',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.12727240604946,
40.579118742961214,
-74.12727240604946,
40.579118742961214]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.289',
'geometry': {'type': 'Point',
'coordinates': [-73.89213760232822, 40.56737588957032]}},
'geometry_name': 'geom',

```

```
'properties': {'name': 'Roxbury',
'stacked': 1,
'annoline1': 'Roxbury',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.89213760232822,
40.56737588957032,
-73.89213760232822,
40.56737588957032]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.290',
'geometry': {'type': 'Point',
'coordinates': [-73.95918459428702, 40.598525095137255]},
'geometry_name': 'geom',
'properties': {'name': 'Homecrest',
'stacked': 1,
'annoline1': 'Homecrest',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.95918459428702,
40.598525095137255,
-73.95918459428702,
40.598525095137255]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.291',
'geometry': {'type': 'Point',
'coordinates': [-73.88114319200604, 40.716414511158185]},
'geometry_name': 'geom',
'properties': {'name': 'Middle Village',
'stacked': 2,
'annoline1': 'Middle',
'annoline2': 'Village',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Queens',
'bbox': [-73.88114319200604,
40.716414511158185,
-73.88114319200604,
40.716414511158185]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.292',
'geometry': {'type': 'Point',
'coordinates': [-74.20152556457658, 40.52626406734812]},
'geometry_name': 'geom',
'properties': {'name': "Prince's Bay",
'stacked': 2,
'annoline1': "Prince's",
'annoline2': 'Bay',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Staten Island',
'bbox': [-74.20152556457658,
40.52626406734812,
```



```
-74.20152556457658,  
40.52626406734812]]},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.293',  
 'geometry': {'type': 'Point',  
 'coordinates': [-74.13792663771568, 40.57650629379489]},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Lighthouse Hill',  
 'stacked': 2,  
 'annoline1': 'Lighthouse',  
 'annoline2': 'Hill',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Staten Island',  
 'bbox': [-74.13792663771568,  
 40.57650629379489,  
 -74.13792663771568,  
 40.57650629379489]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.294',  
 'geometry': {'type': 'Point',  
 'coordinates': [-74.22957080626941, 40.51954145748909]},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Richmond Valley',  
 'stacked': 2,  
 'annoline1': 'Richmond',  
 'annoline2': 'Valley',  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Staten Island',  
 'bbox': [-74.22957080626941,  
 40.51954145748909,  
 -74.22957080626941,  
 40.51954145748909]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.295',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.82667757138641, 40.79060155670148]},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Malba',  
 'stacked': 1,  
 'annoline1': 'Malba',  
 'annoline2': None,  
 'annoline3': None,  
 'annoangle': 0.0,  
 'borough': 'Queens',  
 'bbox': [-73.82667757138641,  
 40.79060155670148,  
 -73.82667757138641,  
 40.79060155670148]}},  
{'type': 'Feature',  
 'id': 'nyu_2451_34572.296',  
 'geometry': {'type': 'Point',  
 'coordinates': [-73.890345709872, 40.6819989345173]},  
 'geometry_name': 'geom',  
 'properties': {'name': 'Highland Park',  
 'stacked': 2,
```

```

'annoline1': 'Highland',
'annoline2': 'Park',
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.890345709872,
40.6819989345173,
-73.890345709872,
40.6819989345173]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.297',
'geometry': {'type': 'Point',
'coordinates': [-73.94841515328893, 40.60937770113766]},
'geometry_name': 'geom',
'properties': {'name': 'Madison',
'stacked': 1,
'annoline1': 'Madison',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Brooklyn',
'bbox': [-73.94841515328893,
40.60937770113766,
-73.94841515328893,
40.60937770113766]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.298',
'geometry': {'type': 'Point',
'coordinates': [-73.86172577555115, 40.85272297633017]},
'geometry_name': 'geom',
'properties': {'name': 'Bronxdale',
'stacked': 1,
'annoline1': 'Bronxdale',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.86172577555115,
40.85272297633017,
-73.86172577555115,
40.85272297633017]}},
{'type': 'Feature',
'id': 'nyu_2451_34572.299',
'geometry': {'type': 'Point',
'coordinates': [-73.85931863221647, 40.86578787802982]},
'geometry_name': 'geom',
'properties': {'name': 'Allerton',
'stacked': 1,
'annoline1': 'Allerton',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.85931863221647,
40.86578787802982,
-73.85931863221647,
40.86578787802982]}},

```

```
{'type': 'Feature',
 'id': 'nyu_2451_34572.300',
 'geometry': {'type': 'Point',
 'coordinates': [-73.90152264513144, 40.8703923914147]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Kingsbridge Heights',
 'stacked': 2,
 'annoline1': 'Kingsbridge',
 'annoline2': 'Heights',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Bronx',
 'bbox': [-73.90152264513144,
 40.8703923914147,
 -73.90152264513144,
 40.8703923914147]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.301',
 'geometry': {'type': 'Point',
 'coordinates': [-73.94817709920184, 40.64692606658579]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Erasmus',
 'stacked': 1,
 'annoline1': 'Erasmus',
 'annoline2': None,
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Brooklyn',
 'bbox': [-73.94817709920184,
 40.64692606658579,
 -73.94817709920184,
 40.64692606658579]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.302',
 'geometry': {'type': 'Point',
 'coordinates': [-74.00011136202637, 40.75665808227519]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Hudson Yards',
 'stacked': 2,
 'annoline1': 'Hudson',
 'annoline2': 'Yards',
 'annoline3': None,
 'annoangle': 0.0,
 'borough': 'Manhattan',
 'bbox': [-74.00011136202637,
 40.75665808227519,
 -74.00011136202637,
 40.75665808227519]}},
{'type': 'Feature',
 'id': 'nyu_2451_34572.303',
 'geometry': {'type': 'Point',
 'coordinates': [-73.80553002968718, 40.58733774018741]}},
 'geometry_name': 'geom',
 'properties': {'name': 'Hammels',
 'stacked': 1,
 'annoline1': 'Hammels',
 'annoline2': None,
```

```

    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.80553002968718,
    40.58733774018741,
    -73.80553002968718,
    40.58733774018741]]},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.304',
    'geometry': {'type': 'Point',
    'coordinates': [-73.76596781445627, 40.611321691283834]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Bayswater',
    'stacked': 1,
    'annoline1': 'Bayswater',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.76596781445627,
    40.611321691283834,
    -73.76596781445627,
    40.611321691283834]}},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.305',
    'geometry': {'type': 'Point',
    'coordinates': [-73.94563070334091, 40.756091297094706]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Queensbridge',
    'stacked': 1,
    'annoline1': 'Queensbridge',
    'annoline2': None,
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Queens',
    'bbox': [-73.94563070334091,
    40.756091297094706,
    -73.94563070334091,
    40.756091297094706]}},
    {'type': 'Feature',
    'id': 'nyu_2451_34572.306',
    'geometry': {'type': 'Point',
    'coordinates': [-74.08173992211962, 40.61731079252983]}},
    'geometry_name': 'geom',
    'properties': {'name': 'Fox Hills',
    'stacked': 2,
    'annoline1': 'Fox',
    'annoline2': 'Hills',
    'annoline3': None,
    'annoangle': 0.0,
    'borough': 'Staten Island',
    'bbox': [-74.08173992211962,
    40.61731079252983,
    -74.08173992211962,
    40.61731079252983]}]},
    'crs': {'type': 'name', 'properties': {'name': 'urn:ogc:def:crs:EPSG::4326'}}},

```

```
'bbox': [-74.2492599487305,
40.5033187866211,
-73.7061614990234,
40.9105606079102]]
```

In [24]:

```
neighborhoods_data = newyork_data['features']
```

In [25]:

```
neighborhoods_data[0]
```

Out[25]:

```
{'type': 'Feature',
'id': 'nyu_2451_34572.1',
'geometry': {'type': 'Point',
'coordinates': [-73.84720052054902, 40.89470517661]},
'geometry_name': 'geom',
'properties': {'name': 'Wakefield',
'stacked': 1,
'annoline1': 'Wakefield',
'annoline2': None,
'annoline3': None,
'annoangle': 0.0,
'borough': 'Bronx',
'bbox': [-73.84720052054902,
40.89470517661,
-73.84720052054902,
40.89470517661]}}
```

In [26]:

```
# define the dataframe columns
column_names = ['Borough', 'Neighborhood', 'Latitude', 'Longitude']

# instantiate the dataframe
neighborhoods = pd.DataFrame(columns=column_names)
```

In [27]:

```
neighborhoods
```

Out[27]:

Borough	Neighborhood	Latitude	Longitude
---------	--------------	----------	-----------

3.Cleaning of Data

In [28]:

```
for data in neighborhoods_data:
    borough = neighborhood_name = data['properties']['borough']
    neighborhood_name = data['properties']['name']

    neighborhood_latlon = data['geometry']['coordinates']
    neighborhood_lat = neighborhood_latlon[1]
    neighborhood_lon = neighborhood_latlon[0]

    neighborhoods = neighborhoods.append({'Borough': borough,
                                          'Neighborhood': neighborhood_name,
                                          'Latitude': neighborhood_lat,
                                          'Longitude': neighborhood_lon}, ignore_index=True
e)
```

In [29]:

```
neighborhoods
```

Out[29]:

	Borough	Neighborhood	Latitude	Longitude
0	Bronx	Wakefield	40.894705	-73.847201
1	Bronx	Co-op City	40.874294	-73.829939
2	Bronx	Eastchester	40.887556	-73.827806
3	Bronx	Fieldston	40.895437	-73.905643
4	Bronx	Riverdale	40.890834	-73.912585
5	Bronx	Kingsbridge	40.881687	-73.902818
6	Manhattan	Marble Hill	40.876551	-73.910660
7	Bronx	Woodlawn	40.898273	-73.867315
8	Bronx	Norwood	40.877224	-73.879391
9	Bronx	Williamsbridge	40.881039	-73.857446
10	Bronx	Baychester	40.866858	-73.835798
11	Bronx	Pelham Parkway	40.857413	-73.854756
12	Bronx	City Island	40.847247	-73.786488
13	Bronx	Bedford Park	40.870185	-73.885512
14	Bronx	University Heights	40.855727	-73.910416
15	Bronx	Morris Heights	40.847898	-73.919672
16	Bronx	Fordham	40.860997	-73.896427
17	Bronx	East Tremont	40.842696	-73.887356
18	Bronx	West Farms	40.839475	-73.877745
19	Bronx	High Bridge	40.836623	-73.926102
20	Bronx	Melrose	40.819754	-73.909422
21	Bronx	Mott Haven	40.806239	-73.916100
22	Bronx	Port Morris	40.801664	-73.913221
23	Bronx	Longwood	40.815099	-73.895788
24	Bronx	Hunts Point	40.809730	-73.883315
25	Bronx	Morrisania	40.823592	-73.901506
26	Bronx	Soundview	40.821012	-73.865746
27	Bronx	Clason Point	40.806551	-73.854144
28	Bronx	Throgs Neck	40.815109	-73.816350
29	Bronx	Country Club	40.844246	-73.824099
30	Bronx	Parkchester	40.837938	-73.856003
31	Bronx	Westchester Square	40.840619	-73.842194
32	Bronx	Van Nest	40.843608	-73.866299
33	Bronx	Morris Park	40.847549	-73.850402

	Borough	Neighborhood	Latitude	Longitude
34	Bronx	Belmont	40.857277	-73.888452
35	Bronx	Spuyten Duyvil	40.881395	-73.917190
36	Bronx	North Riverdale	40.908543	-73.904531
37	Bronx	Pelham Bay	40.850641	-73.832074
38	Bronx	Schuylerville	40.826580	-73.826203
39	Bronx	Edgewater Park	40.821986	-73.813885
40	Bronx	Castle Hill	40.819014	-73.848027
41	Bronx	Olinville	40.871371	-73.863324
42	Bronx	Pelham Gardens	40.862966	-73.841612
43	Bronx	Concourse	40.834284	-73.915589
44	Bronx	Unionport	40.829774	-73.850535
45	Bronx	Edenwald	40.884561	-73.848083
46	Brooklyn	Bay Ridge	40.625801	-74.030621
47	Brooklyn	Bensonhurst	40.611009	-73.995180
48	Brooklyn	Sunset Park	40.645103	-74.010316
49	Brooklyn	Greenpoint	40.730201	-73.954241
50	Brooklyn	Gravesend	40.595260	-73.973471
51	Brooklyn	Brighton Beach	40.576825	-73.965094
52	Brooklyn	Sheepshead Bay	40.586890	-73.943186
53	Brooklyn	Manhattan Terrace	40.614433	-73.957438
54	Brooklyn	Flatbush	40.636326	-73.958401
55	Brooklyn	Crown Heights	40.670829	-73.943291
56	Brooklyn	East Flatbush	40.641718	-73.936103
57	Brooklyn	Kensington	40.642382	-73.980421
58	Brooklyn	Windsor Terrace	40.656946	-73.980073
59	Brooklyn	Prospect Heights	40.676822	-73.964859
60	Brooklyn	Brownsville	40.663950	-73.910235
61	Brooklyn	Williamsburg	40.707144	-73.958115
62	Brooklyn	Bushwick	40.698116	-73.925258
63	Brooklyn	Bedford Stuyvesant	40.687232	-73.941785
64	Brooklyn	Brooklyn Heights	40.695864	-73.993782
65	Brooklyn	Cobble Hill	40.687920	-73.998561
66	Brooklyn	Carroll Gardens	40.680540	-73.994654
67	Brooklyn	Red Hook	40.676253	-74.012759
68	Brooklyn	Gowanus	40.673931	-73.994441
69	Brooklyn	Fort Greene	40.688527	-73.972906

	Borough	Neighborhood	Latitude	Longitude
70	Brooklyn	Park Slope	40.672321	-73.977050
71	Brooklyn	Cypress Hills	40.682391	-73.876616
72	Brooklyn	East New York	40.669926	-73.880699
73	Brooklyn	Starrett City	40.647589	-73.879370
74	Brooklyn	Canarsie	40.635564	-73.902093
75	Brooklyn	Flatlands	40.630446	-73.929113
76	Brooklyn	Mill Island	40.606336	-73.908186
77	Brooklyn	Manhattan Beach	40.577914	-73.943537
78	Brooklyn	Coney Island	40.574293	-73.988683
79	Brooklyn	Bath Beach	40.599519	-73.998752
80	Brooklyn	Borough Park	40.633131	-73.990498
81	Brooklyn	Dyker Heights	40.619219	-74.019314
82	Brooklyn	Gerritsen Beach	40.590848	-73.930102
83	Brooklyn	Marine Park	40.609748	-73.931344
84	Brooklyn	Clinton Hill	40.693229	-73.967843
85	Brooklyn	Sea Gate	40.576375	-74.007873
86	Brooklyn	Downtown	40.690844	-73.983463
87	Brooklyn	Boerum Hill	40.685683	-73.983748
88	Brooklyn	Prospect Lefferts Gardens	40.658420	-73.954899
89	Brooklyn	Ocean Hill	40.678403	-73.913068
90	Brooklyn	City Line	40.678570	-73.867976
91	Brooklyn	Bergen Beach	40.615150	-73.898556
92	Brooklyn	Midwood	40.625596	-73.957595
93	Brooklyn	Prospect Park South	40.647009	-73.962613
94	Brooklyn	Georgetown	40.623845	-73.916075
95	Brooklyn	East Williamsburg	40.708492	-73.938858
96	Brooklyn	North Side	40.714823	-73.958809
97	Brooklyn	South Side	40.710861	-73.958001
98	Brooklyn	Ocean Parkway	40.613060	-73.968367
99	Brooklyn	Fort Hamilton	40.614768	-74.031979
100	Manhattan	Chinatown	40.715618	-73.994279
101	Manhattan	Washington Heights	40.851903	-73.936900
102	Manhattan	Inwood	40.867684	-73.921210
103	Manhattan	Hamilton Heights	40.823604	-73.949688
104	Manhattan	Manhattanville	40.816934	-73.957385
105	Manhattan	Central Harlem	40.815976	-73.943211

	Borough	Neighborhood	Latitude	Longitude
106	Manhattan	East Harlem	40.792249	-73.944182
107	Manhattan	Upper East Side	40.775639	-73.960508
108	Manhattan	Yorkville	40.775930	-73.947118
109	Manhattan	Lenox Hill	40.768113	-73.958860
110	Manhattan	Roosevelt Island	40.762160	-73.949168
111	Manhattan	Upper West Side	40.787658	-73.977059
112	Manhattan	Lincoln Square	40.773529	-73.985338
113	Manhattan	Clinton	40.759101	-73.996119
114	Manhattan	Midtown	40.754691	-73.981669
115	Manhattan	Murray Hill	40.748303	-73.978332
116	Manhattan	Chelsea	40.744035	-74.003116
117	Manhattan	Greenwich Village	40.726933	-73.999914
118	Manhattan	East Village	40.727847	-73.982226
119	Manhattan	Lower East Side	40.717807	-73.980890
120	Manhattan	Tribeca	40.721522	-74.010683
121	Manhattan	Little Italy	40.719324	-73.997305
122	Manhattan	Soho	40.722184	-74.000657
123	Manhattan	West Village	40.734434	-74.006180
124	Manhattan	Manhattan Valley	40.797307	-73.964286
125	Manhattan	Morningside Heights	40.808000	-73.963896
126	Manhattan	Gramercy	40.737210	-73.981376
127	Manhattan	Battery Park City	40.711932	-74.016869
128	Manhattan	Financial District	40.707107	-74.010665
129	Queens	Astoria	40.768509	-73.915654
130	Queens	Woodside	40.746349	-73.901842
131	Queens	Jackson Heights	40.751981	-73.882821
132	Queens	Elmhurst	40.744049	-73.881656
133	Queens	Howard Beach	40.654225	-73.838138
134	Queens	Corona	40.742382	-73.856825
135	Queens	Forest Hills	40.725264	-73.844475
136	Queens	Kew Gardens	40.705179	-73.829819
137	Queens	Richmond Hill	40.697947	-73.831833
138	Queens	Flushing	40.764454	-73.831773
139	Queens	Long Island City	40.750217	-73.939202
140	Queens	Sunnyside	40.740176	-73.926916
141	Queens	East Elmhurst	40.764073	-73.867041

	Borough	Neighborhood	Latitude	Longitude
142	Queens	Maspeth	40.725427	-73.896217
143	Queens	Ridgewood	40.708323	-73.901435
144	Queens	Glendale	40.702762	-73.870742
145	Queens	Rego Park	40.728974	-73.857827
146	Queens	Woodhaven	40.689887	-73.858110
147	Queens	Ozone Park	40.680708	-73.843203
148	Queens	South Ozone Park	40.668550	-73.809865
149	Queens	College Point	40.784903	-73.843045
150	Queens	Whitestone	40.781291	-73.814202
151	Queens	Bayside	40.766041	-73.774274
152	Queens	Auburndale	40.761730	-73.791762
153	Queens	Little Neck	40.770826	-73.738898
154	Queens	Douglaston	40.766846	-73.742498
155	Queens	Glen Oaks	40.749441	-73.715481
156	Queens	Bellerose	40.728573	-73.720128
157	Queens	Kew Gardens Hills	40.722578	-73.820878
158	Queens	Fresh Meadows	40.734394	-73.782713
159	Queens	Briarwood	40.710935	-73.811748
160	Queens	Jamaica Center	40.704657	-73.796902
161	Queens	Oakland Gardens	40.745619	-73.754950
162	Queens	Queens Village	40.718893	-73.738715
163	Queens	Hollis	40.711243	-73.759250
164	Queens	South Jamaica	40.696911	-73.790426
165	Queens	St. Albans	40.694445	-73.758676
166	Queens	Rochdale	40.675211	-73.772588
167	Queens	Springfield Gardens	40.666230	-73.760421
168	Queens	Cambria Heights	40.692775	-73.735269
169	Queens	Rosedale	40.659816	-73.735261
170	Queens	Far Rockaway	40.603134	-73.754980
171	Queens	Broad Channel	40.603027	-73.820055
172	Queens	Breezy Point	40.557401	-73.925512
173	Queens	Steinway	40.775923	-73.902290
174	Queens	Beechhurst	40.792781	-73.804365
175	Queens	Bay Terrace	40.782843	-73.776802
176	Queens	Edgemere	40.595642	-73.776133
177	Queens	Arverne	40.589144	-73.791992

	Borough	Neighborhood	Latitude	Longitude
178	Queens	Rockaway Beach	40.582802	-73.822361
179	Queens	Neponsit	40.572037	-73.857547
180	Queens	Murray Hill	40.764126	-73.812763
181	Queens	Floral Park	40.741378	-73.708847
182	Queens	Holliswood	40.720957	-73.767142
183	Queens	Jamaica Estates	40.716805	-73.787227
184	Queens	Queensboro Hill	40.744572	-73.825809
185	Queens	Hillcrest	40.723825	-73.797603
186	Queens	Ravenswood	40.761705	-73.931575
187	Queens	Lindenwood	40.663918	-73.849638
188	Queens	Laurelton	40.667884	-73.740256
189	Queens	Lefrak City	40.736075	-73.862525
190	Queens	Belle Harbor	40.576156	-73.854018
191	Queens	Rockaway Park	40.580343	-73.841534
192	Queens	Somerville	40.597711	-73.796648
193	Queens	Brookville	40.660003	-73.751753
194	Queens	Bellaire	40.733014	-73.738892
195	Queens	North Corona	40.754071	-73.857518
196	Queens	Forest Hills Gardens	40.714611	-73.841022
197	Staten Island	St. George	40.644982	-74.079353
198	Staten Island	New Brighton	40.640615	-74.087017
199	Staten Island	Stapleton	40.626928	-74.077902
200	Staten Island	Rosebank	40.615305	-74.069805
201	Staten Island	West Brighton	40.631879	-74.107182
202	Staten Island	Grymes Hill	40.624185	-74.087248
203	Staten Island	Todt Hill	40.597069	-74.111329
204	Staten Island	South Beach	40.580247	-74.079553
205	Staten Island	Port Richmond	40.633669	-74.129434
206	Staten Island	Mariner's Harbor	40.632546	-74.150085
207	Staten Island	Port Ivory	40.639683	-74.174645
208	Staten Island	Castleton Corners	40.613336	-74.119181
209	Staten Island	New Springville	40.594252	-74.164960
210	Staten Island	Travis	40.586314	-74.190737
211	Staten Island	New Dorp	40.572572	-74.116479
212	Staten Island	Oakwood	40.558462	-74.121566
213	Staten Island	Great Kills	40.549480	-74.149324

	Borough	Neighborhood	Latitude	Longitude
214	Staten Island	Eltingville	40.542231	-74.164331
215	Staten Island	Annadale	40.538114	-74.178549
216	Staten Island	Woodrow	40.541968	-74.205246
217	Staten Island	Tottenville	40.505334	-74.246569
218	Staten Island	Tompkinsville	40.637316	-74.080554
219	Staten Island	Silver Lake	40.619193	-74.096290
220	Staten Island	Sunnyside	40.612760	-74.097126
221	Brooklyn	Ditmas Park	40.643675	-73.961013
222	Brooklyn	Wingate	40.660947	-73.937187
223	Brooklyn	Rugby	40.655572	-73.926882
224	Staten Island	Park Hill	40.609190	-74.080157
225	Staten Island	Westerleigh	40.621090	-74.133041
226	Staten Island	Graniteville	40.620172	-74.153152
227	Staten Island	Arlington	40.635325	-74.165104
228	Staten Island	Arrochar	40.596313	-74.067124
229	Staten Island	Grasmere	40.598268	-74.076674
230	Staten Island	Old Town	40.596329	-74.087511
231	Staten Island	Dongan Hills	40.588673	-74.096399
232	Staten Island	Midland Beach	40.573527	-74.093483
233	Staten Island	Grant City	40.576216	-74.105856
234	Staten Island	New Dorp Beach	40.564255	-74.104327
235	Staten Island	Bay Terrace	40.553988	-74.139166
236	Staten Island	Huguenot	40.531912	-74.191741
237	Staten Island	Pleasant Plains	40.524699	-74.219831
238	Staten Island	Butler Manor	40.506082	-74.229504
239	Staten Island	Charleston	40.530531	-74.232158
240	Staten Island	Rossville	40.549404	-74.215729
241	Staten Island	Arden Heights	40.549286	-74.185887
242	Staten Island	Greenridge	40.555295	-74.170794
243	Staten Island	Heartland Village	40.589139	-74.159022
244	Staten Island	Chelsea	40.594726	-74.189560
245	Staten Island	Bloomfield	40.605779	-74.187256
246	Staten Island	Bulls Head	40.609592	-74.159409
247	Manhattan	Carnegie Hill	40.782683	-73.953256
248	Manhattan	Noho	40.723259	-73.988434
249	Manhattan	Civic Center	40.715229	-74.005415

	Borough	Neighborhood	Latitude	Longitude
250	Manhattan	Midtown South	40.748510	-73.988713
251	Staten Island	Richmond Town	40.569606	-74.134057
252	Staten Island	Shore Acres	40.609719	-74.066678
253	Staten Island	Clifton	40.619178	-74.072642
254	Staten Island	Concord	40.604473	-74.084024
255	Staten Island	Emerson Hill	40.606794	-74.097762
256	Staten Island	Randall Manor	40.635630	-74.098051
257	Staten Island	Howland Hook	40.638433	-74.186223
258	Staten Island	Elm Park	40.630147	-74.141817
259	Brooklyn	Remsen Village	40.652117	-73.916653
260	Brooklyn	New Lots	40.662744	-73.885118
261	Brooklyn	Paerdegat Basin	40.631318	-73.902335
262	Brooklyn	Mill Basin	40.615974	-73.915154
263	Queens	Jamaica Hills	40.711460	-73.796465
264	Queens	Utopia	40.733500	-73.796717
265	Queens	Pomonok	40.734936	-73.804861
266	Queens	Astoria Heights	40.770317	-73.894680
267	Bronx	Claremont Village	40.831428	-73.901199
268	Bronx	Concourse Village	40.824780	-73.915847
269	Bronx	Mount Eden	40.843826	-73.916556
270	Bronx	Mount Hope	40.848842	-73.908299
271	Manhattan	Sutton Place	40.760280	-73.963556
272	Queens	Hunters Point	40.743414	-73.953868
273	Manhattan	Turtle Bay	40.752042	-73.967708
274	Manhattan	Tudor City	40.746917	-73.971219
275	Manhattan	Stuyvesant Town	40.731000	-73.974052
276	Manhattan	Flatiron	40.739673	-73.990947
277	Queens	Sunnyside Gardens	40.745652	-73.918193
278	Queens	Blissville	40.737251	-73.932442
279	Brooklyn	Fulton Ferry	40.703281	-73.995508
280	Brooklyn	Vinegar Hill	40.703321	-73.981116
281	Brooklyn	Weeksville	40.675040	-73.930531
282	Brooklyn	Broadway Junction	40.677861	-73.903317
283	Brooklyn	Dumbo	40.703176	-73.988753
284	Staten Island	Manor Heights	40.601810	-74.120594
285	Staten Island	Willowbrook	40.603707	-74.132084

	Borough	Neighborhood	Latitude	Longitude
286	Staten Island	Sandy Ground	40.541140	-74.217766
287	Staten Island	Egbertville	40.579119	-74.127272
288	Queens	Roxbury	40.567376	-73.892138
289	Brooklyn	Homecrest	40.598525	-73.959185
290	Queens	Middle Village	40.716415	-73.881143
291	Staten Island	Prince's Bay	40.526264	-74.201526
292	Staten Island	Lighthouse Hill	40.576506	-74.137927
293	Staten Island	Richmond Valley	40.519541	-74.229571
294	Queens	Malba	40.790602	-73.826678
295	Brooklyn	Highland Park	40.681999	-73.890346
296	Brooklyn	Madison	40.609378	-73.948415
297	Bronx	Bronxdale	40.852723	-73.861726
298	Bronx	Allerton	40.865788	-73.859319
299	Bronx	Kingsbridge Heights	40.870392	-73.901523
300	Brooklyn	Erasmus	40.646926	-73.948177
301	Manhattan	Hudson Yards	40.756658	-74.000111
302	Queens	Hammels	40.587338	-73.805530
303	Queens	Bayswater	40.611322	-73.765968
304	Queens	Queensbridge	40.756091	-73.945631
305	Staten Island	Fox Hills	40.617311	-74.081740

In [30]:

```
print('The dataframe has {} boroughs and {} neighborhoods.'.format(
    len(neighborhoods['Borough'].unique()),
    neighborhood.shape[0]
))
```

The dataframe has 5 boroughs and 306 neighborhoods.

In [31]:

```
address = 'New York City, NY'

geolocator = Nominatim(user_agent="ny_explorer")
location = geolocator.geocode(address)
latitude = location.latitude
longitude = location.longitude
print('The geograpical coordinate of New York City are {}, {}'.format(latitude, longitude))
```

The geographical coordinate of New York City are 40.7127281, -74.0060152.

Create a map of New York with neighborhoods superimposed on top

In [32]:

```
# create map of New York using Latitude and Longitude values
map_newyork = folium.Map(location=[latitude, longitude], zoom_start=10)

# add markers to map
for lat, lng, borough, neighborhood in zip(neighborhoods['Latitude'], neighborhoods['Longitude'], neighborhoods['Borough'], neighborhoods['Neighborhood']):
    label = '{} , {}'.format(neighborhood, borough)
    label = folium.Popup(label, parse_html=True)
    folium.CircleMarker(
        [lat, lng],
        radius=5,
        popup=label,
        color='blue',
        fill=True,
        fill_color='#3186cc',
        fill_opacity=0.7,
        parse_html=False).add_to(map_newyork)

map_newyork
```

Out[32]:

Let's simplify the above map and segment and cluster only the neighborhoods in Queens. So let's slice the original dataframe and create a new dataframe of the Queens data.

In [33]:

```
Queens_data = neighborhoods[neighborhoods['Borough'] == 'Queens'].reset_index(drop=True)
Queens_data.head()
```

Out[33]:

	Borough	Neighborhood	Latitude	Longitude
0	Queens	Astoria	40.768509	-73.915654
1	Queens	Woodside	40.746349	-73.901842
2	Queens	Jackson Heights	40.751981	-73.882821
3	Queens	Elmhurst	40.744049	-73.881656
4	Queens	Howard Beach	40.654225	-73.838138

In [34]:

```
address = 'Queens, NY'

geolocator = Nominatim(user_agent="ny_explorer")
location = geolocator.geocode(address)
latitude = location.latitude
longitude = location.longitude
print('The geograpical coordinate of Queens are {}, {}'.format(latitude, longitude))
```

The geograpical coordinate of Queens are 40.6524927, -73.7914214158161.

In [35]:

```
# create map of Queens using Latitude and Longitude values
map_Queens = folium.Map(location=[latitude, longitude], zoom_start=11)

# add markers to map
for lat, lng, label in zip(Queens_data['Latitude'], Queens_data['Longitude'], Queens_data[
'Neighborhood']):
    label = folium.Popup(label, parse_html=True)
    folium.CircleMarker(
        [lat, lng],
        radius=5,
        popup=label,
        color='blue',
        fill=True,
        fill_color='#3186cc',
        fill_opacity=0.7,
        parse_html=False).add_to(map_Queens)

map_Queens
```

Out[35]:

4.Data Modelling

Define Foursquare Credentials and Version

In [36]:

```
CLIENT_ID = 'HZWQATJKJFBOW35GMHRSYLLJ5UG4HHYVT0NINAR4VFASGSY0' # your Foursquare ID
CLIENT_SECRET = '0QOE2DPPCVSYUBN1UN3JOMHNGP5EUKXP3PQHVBV534DWDKKO' # your Foursquare Secret
VERSION = '20180605' # Foursquare API version

print('Your credentials:')
print('CLIENT_ID: ' + CLIENT_ID)
print('CLIENT_SECRET: ' + CLIENT_SECRET)
```

Your credentials:

```
CLIENT_ID: HZWQATJKJFBOW35GMHRSYLLJ5UG4HHYVT0NINAR4VFASGSY0
CLIENT_SECRET: 0QOE2DPPCVSYUBN1UN3JOMHNGP5EUKXP3PQHVBV534DWDKKO
```

In [37]:

```
Queens_data.loc[0, 'Neighborhood']
```

Out[37]:

'Astoria'

In [38]:

```
neighborhood_latitude = Queens_data.loc[0, 'Latitude'] # neighborhood latitude value
neighborhood_longitude = Queens_data.loc[0, 'Longitude'] # neighborhood longitude value

neighborhood_name = Queens_data.loc[0, 'Neighborhood'] # neighborhood name

print('Latitude and longitude values of {} are {}, {}'.format(neighborhood_name,
                                                                neighborhood_latitude,
                                                                neighborhood_longitude))
```

Latitude and longitude values of Astoria are 40.76850859335492, -73.91565374304234.

In [39]:

```
LIMIT = 100 # limit of number of venues returned by Foursquare API

radius = 500 # define radius

url = 'https://api.foursquare.com/v2/venues/explore?&client_id={}&client_secret={}&v={}&ll={},{},{}&radius={}&limit={}'.format(
    CLIENT_ID,
    CLIENT_SECRET,
    VERSION,
    neighborhood_latitude,
    neighborhood_longitude,
    radius,
    LIMIT)
url # display URL
```

Out[39]:

```
'https://api.foursquare.com/v2/venues/explore?&client_id=HZWQATJKJFBOW35GMHRS
YLLJ5UG4HHYVT0NINAR4VFASGSY0&client_secret=0QOE2DPPCVSYUBN1UN3JOMHNGP5EUKXP3
PQHBV534DWDKK0&v=20180605&ll=40.76850859335492,-73.91565374304234&radius=500&
limit=100'
```

In [40]:

```
results = requests.get(url).json()  
results
```

Out[40]:

```
{'meta': {'code': 200, 'requestId': '5d2c32558afbe0003a096a2e'},
 'response': {'suggestedFilters': {'header': 'Tap to show:',
   'filters': [{ 'name': 'Open now', 'key': 'openNow'},
    { 'name': '$-$$$$', 'key': 'price'}]},
  'headerLocation': 'Astoria',
  'headerFullLocation': 'Astoria, Queens',
  'headerLocationGranularity': 'neighborhood',
  'totalResults': 109,
  'suggestedBounds': { 'ne': { 'lat': 40.773008597854925,
    'lng': -73.90972309237958},
   'sw': { 'lat': 40.76400858885492, 'lng': -73.9215843937051}},
  'groups': [{ 'type': 'Recommended Places',
    'name': 'recommended',
    'items': [{ 'reasons': { 'count': 0,
      'items': [{ 'summary': 'This spot is popular',
        'type': 'general',
        'reasonName': 'globalInteractionReason'}]}],
    'venue': { 'id': '4bdf502a89ca76b062b75d5e',
      'name': 'Favela Grill',
      'location': { 'address': '33-18 28th Ave',
        'crossStreet': 'btwn 33rd & 34th St.',
        'lat': 40.76734843380796,
        'lng': -73.91789747356819,
        'labeledLatLngs': [{ 'label': 'display',
          'lat': 40.76734843380796,
          'lng': -73.91789747356819}],
        'distance': 229,
        'postalCode': '11103',
        'cc': 'US',
        'city': 'Astoria',
        'state': 'NY',
        'country': 'United States',
        'formattedAddress': ['33-18 28th Ave (btwn 33rd & 34th St.)',
          'Astoria, NY 11103',
          'United States']}],
      'categories': [{ 'id': '4bf58dd8d48988d16b941735',
        'name': 'Brazilian Restaurant',
        'pluralName': 'Brazilian Restaurants',
        'shortName': 'Brazilian',
        'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/argentinian_',
          'suffix': '.png'},
        'primary': True}],
      'delivery': { 'id': '289413',
        'url': 'https://www.seamless.com/menu/favela-brazilian-cuisine-33-18-28th-ave-astoria/289413?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=affiliate&utm_campaign=1131&utm_content=289413',
        'provider': { 'name': 'seamless',
          'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
            'sizes': [40, 50],
            'name': '/delivery_provider_seamless_20180129.png'}}},
      'photos': { 'count': 0, 'groups': []},
      'referralId': 'e-0-4bdf502a89ca76b062b75d5e-0'},
    { 'reasons': { 'count': 0,
      'items': [{ 'summary': 'This spot is popular',
```

```

    'type': 'general',
    'reasonName': 'globalInteractionReason']]],
'venuce': {'id': '4c94d26d58d4b60c40fc2b29',
'name': 'CrossFit Queens',
'location': {'address': '25-50 31st St',
'crossStreet': 'Astoria Blvd',
'lat': 40.76940404539832,
'lng': -73.91897736979166,
'labeledLatLngs': [{'label': 'display',
'lat': 40.76940404539832,
'lng': -73.91897736979166}]},
'distance': 297,
'postalCode': '11102',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['25-50 31st St (Astoria Blvd)',
'Astoria, NY 11102',
'United States']},
'categories': [{'id': '4bf58dd8d48988d176941735',
'name': 'Gym',
'pluralName': 'Gyms',
'shortName': 'Gym',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/building/
gym_',
'suffix': '.png'},
'primary': True}],
'photos': {'count': 0, 'groups': []}},
'referralId': 'e-0-4c94d26d58d4b60c40fc2b29-1'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason']]],
'venuce': {'id': '4a9c0105f964a520b03520e3',
'name': 'Titan Foods Inc.',
'location': {'address': '25-56 31st St',
'crossStreet': 'btwn 28th Rd. & Newtown Ave.',
'lat': 40.76919777900986,
'lng': -73.9192530467441,
'labeledLatLngs': [{'label': 'display',
'lat': 40.76919777900986,
'lng': -73.9192530467441}]},
'distance': 312,
'postalCode': '11102',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['25-56 31st St (btwn 28th Rd. & Newtown Ave.)',
'Astoria, NY 11102',
'United States']},
'categories': [{'id': '4bf58dd8d48988d1f5941735',
'name': 'Gourmet Shop',
'pluralName': 'Gourmet Shops',
'shortName': 'Gourmet',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/foo

```



```

d_gourmet_',
  'suffix': '.png'},
  'primary': True]],
  'photos': {'count': 0, 'groups': []},
  'venuePage': {'id': '68301435'}},
  'referralId': 'e-0-4a9c0105f964a520b03520e3-2'},
  {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
      'type': 'general',
      'reasonName': 'globalInteractionReason'}]}],
  'venue': {'id': '52c580e8498eddd52d925dd9',
    'name': 'Orange Blossom',
    'location': {'lat': 40.76985614579503,
      'lng': -73.9170119137407,
      'labeledLatLngs': [{'label': 'display',
        'lat': 40.76985614579503,
        'lng': -73.9170119137407}]},
    'distance': 188,
    'cc': 'US',
    'city': 'Queens',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['Queens, NY', 'United States']},
  'categories': [{'id': '4bf58dd8d48988d1f5941735',
    'name': 'Gourmet Shop',
    'pluralName': 'Gourmet Shops',
    'shortName': 'Gourmet',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/fo

```

```

d_gourmet_',
  'suffix': '.png'},
  'primary': True]],
  'photos': {'count': 0, 'groups': []},
  'referralId': 'e-0-52c580e8498eddd52d925dd9-3'},
  {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
      'type': 'general',
      'reasonName': 'globalInteractionReason'}]}],
  'venue': {'id': '4d7ce85486cfa14365a2d2a0',
    'name': 'Simply Fit Astoria',
    'location': {'address': '37-16 Astoria Blvd',
      'crossStreet': 'at 25 Ave',
      'lat': 40.76911377971976,
      'lng': -73.91240303580314,
      'labeledLatLngs': [{'label': 'display',
        'lat': 40.76911377971976,
        'lng': -73.91240303580314}]},
    'distance': 282,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['37-16 Astoria Blvd (at 25 Ave)',
      'Astoria, NY 11103',
      'United States']},
  'categories': [{'id': '4bf58dd8d48988d176941735',
    'name': 'Gym',

```

```

    'pluralName': 'Gyms',
    'shortName': 'Gym',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/building/
gym_',
    'suffix': '.png'},
    'primary': True}},
    'photos': {'count': 0, 'groups': []}},
    'referralId': 'e-0-4d7ce85486cfa14365a2d2a0-4'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]}},
    'venue': {'id': '514f9fd5e4b023ae1edd4a68',
    'name': 'Off The Hook',
    'location': {'address': '28-08 34th St',
    'crossStreet': 'btwn 28th & 30th Ave.',
    'lat': 40.76720036066658,
    'lng': -73.91810419486981,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.76720036066658,
    'lng': -73.91810419486981}]},
    'distance': 252,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['28-08 34th St (btwn 28th & 30th Ave.)',
    'Astoria, NY 11103',
    'United States']},
    'categories': [{'id': '4bf58dd8d48988d1ce941735',
    'name': 'Seafood Restaurant',
    'pluralName': 'Seafood Restaurants',
    'shortName': 'Seafood',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/seaf
ood_',
    'suffix': '.png'},
    'primary': True}},
    'delivery': {'id': '299409',
    'url': 'https://www.seamless.com/menu/off-the-hook-raw-bar--grill-28-
08-34th-st-astoria/299409?affiliate=1131&utm_source=foursquare-affiliate-netw
ork&utm_medium=affiliate&utm_campaign=1131&utm_content=299409',
    'provider': {'name': 'seamless',
    'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
    'sizes': [40, 50],
    'name': '/delivery_provider_seamless_20180129.png'}}},
    'photos': {'count': 0, 'groups': []},
    'venuePage': {'id': '79257111'}},
    'referralId': 'e-0-514f9fd5e4b023ae1edd4a68-5'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]}},
    'venue': {'id': '5208fbc011d228eef0972843',
    'name': 'Sitan Muay Thai',
    'location': {'address': '25-73 Steinway St',
    'lat': 40.76610776852132,

```

```

'lng': -73.9132238599876,
'labeledLatLngs': [{'label': 'display',
  'lat': 40.76610776852132,
  'lng': -73.9132238599876}],
'distance': 336,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['25-73 Steinway St',
  'Astoria, NY 11103',
  'United States']],
'categories': [{'id': '4bf58dd8d48988d101941735',
  'name': 'Martial Arts Dojo',
  'pluralName': 'Martial Arts Dojos',
  'shortName': 'Martial Arts',
  'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/gym
_martialarts_',
  'suffix': '.png'},
  'primary': True}],
'photos': {'count': 0, 'groups': []},
'venuePage': {'id': '83742041'}},
'referralId': 'e-0-5208fbc011d228eef0972843-6'},
{'reasons': {'count': 0,
  'items': [{'summary': 'This spot is popular',
  'type': 'general',
  'reasonName': 'globalInteractionReason'}]},
'venue': {'id': '4ba58abaf964a520d01039e3',
  'name': 'Al-sham Sweets and Pastries',
  'location': {'address': '24-39 Steinway St',
  'crossStreet': 'Astoria Boulevard & 25th Avenue',
  'lat': 40.768076961690774,
  'lng': -73.91156100683968,
  'labeledLatLngs': [{'label': 'display',
  'lat': 40.768076961690774,
  'lng': -73.91156100683968}],
  'distance': 348,
  'postalCode': '11103',
  'cc': 'US',
  'neighborhood': 'Astoria',
  'city': 'Astoria',
  'state': 'NY',
  'country': 'United States',
  'formattedAddress': ['24-39 Steinway St (Astoria Boulevard & 25th Ave
nue)',
  'Astoria, NY 11103',
  'United States']],
'categories': [{'id': '4bf58dd8d48988d115941735',
  'name': 'Middle Eastern Restaurant',
  'pluralName': 'Middle Eastern Restaurants',
  'shortName': 'Middle Eastern',
  'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/midd
leeastern_',
  'suffix': '.png'},
  'primary': True}],
'photos': {'count': 0, 'groups': []}},

```

```

'referralId': 'e-0-4ba58abaf964a520d01039e3-7'},
{'reasons': {'count': 0,
  'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]}],
'venuce': {'id': '4176fc00f964a520b61d1fe3',
  'name': 'Irish Rover',
  'location': {'address': '3718 28th Ave',
    'crossStreet': 'at 38th St.',
    'lat': 40.76583545894952,
    'lng': -73.91464727517706,
    'labeledLatLngs': [{'label': 'display',
      'lat': 40.76583545894952,
      'lng': -73.91464727517706}]},
  'distance': 309,
  'postalCode': '11103',
  'cc': 'US',
  'city': 'Astoria',
  'state': 'NY',
  'country': 'United States',
  'formattedAddress': ['3718 28th Ave (at 38th St.)',
    'Astoria, NY 11103',
    'United States']},
'categories': [{'id': '4bf58dd8d48988d11b941735',
  'name': 'Pub',
  'pluralName': 'Pubs',
  'shortName': 'Pub',
  'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/pub_',
    'suffix': '.png'},
  'primary': True}],
'photos': {'count': 0, 'groups': []}},
'referralId': 'e-0-4176fc00f964a520b61d1fe3-8'},
{'reasons': {'count': 0,
  'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]}],
'venuce': {'id': '4adc66a6f964a520122c21e3',
  'name': 'El Cafetal',
  'location': {'address': '3019 Astoria Blvd',
    'lat': 40.77015319512015,
    'lng': -73.91821410404256,
    'labeledLatLngs': [{'label': 'display',
      'lat': 40.77015319512015,
      'lng': -73.91821410404256}]},
  'distance': 283,
  'postalCode': '11102',
  'cc': 'US',
  'city': 'Astoria',
  'state': 'NY',
  'country': 'United States',
  'formattedAddress': ['3019 Astoria Blvd',
    'Astoria, NY 11102',
    'United States']},
'categories': [{'id': '4bf58dd8d48988d1c1941735',
  'name': 'Mexican Restaurant',
  'pluralName': 'Mexican Restaurants',

```

```

    'shortName': 'Mexican',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/mexi
can_',
    'suffix': '.png'},
    'primary': True}],
    'photos': {'count': 0, 'groups': []}},
    'referralId': 'e-0-4adc66a6f964a520122c21e3-9'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': {'id': '4ff0ec8ee4b08cbcb87a4e6b',
    'name': 'Noisette',
    'location': {'address': '24-21 Steinway St',
    'lat': 40.768543965185785,
    'lng': -73.91124779846233,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.768543965185785,
    'lng': -73.91124779846233}],
    'distance': 371,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['24-21 Steinway St',
    'Astoria, NY 11103',
    'United States']},
    'categories': [{'id': '4bf58dd8d48988d1d0941735',
    'name': 'Dessert Shop',
    'pluralName': 'Dessert Shops',
    'shortName': 'Desserts',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/dess
ert_',
    'suffix': '.png'},
    'primary': True}],
    'photos': {'count': 0, 'groups': []}},
    'referralId': 'e-0-4ff0ec8ee4b08cbcb87a4e6b-10'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': {'id': '4bbfe9634cdfc9b6bd369221',
    'name': "Sabry's",
    'location': {'address': '2425 Steinway St',
    'lat': 40.76844624846522,
    'lng': -73.91126714076336,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.76844624846522,
    'lng': -73.91126714076336}],
    'distance': 369,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['2425 Steinway St',

```

```

'Astoria, NY 11103',
'United States']},
'categories': [{ 'id': '4bf58dd8d48988d1ce941735',
'name': 'Seafood Restaurant',
'pluralName': 'Seafood Restaurants',
'shortName': 'Seafood',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/seaf
ood_',
'suffix': '.png'},
'primary': True}],
'photos': { 'count': 0, 'groups': []},
'referralId': 'e-0-4bbfe9634cdfc9b6bd369221-11'},
{'reasons': { 'count': 0,
'items': [{ 'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': { 'id': '4b427919f964a52093d425e3',
'name': 'Duzan',
'location': { 'address': '2411 Steinway St',
'crossStreet': 'Astoria Blvd.',
'lat': 40.768729618804265,
'lng': -73.91101346607775,
'labeledLatLngs': [{ 'label': 'display',
'lat': 40.768729618804265,
'lng': -73.91101346607775}],
'distance': 391,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['2411 Steinway St (Astoria Blvd.)',
'Astoria, NY 11103',
'United States']},
'categories': [{ 'id': '4bf58dd8d48988d10b941735',
'name': 'Falafel Restaurant',
'pluralName': 'Falafel Restaurants',
'shortName': 'Falafel',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/fala
fel_',
'suffix': '.png'},
'primary': True}],
'delivery': { 'id': '342423',
'url': 'https://www.seamless.com/menu/duzan-2411-steinway-st-astoria/
342423?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=affi
liate&utm_campaign=1131&utm_content=342423',
'provider': { 'name': 'seamless',
'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
'sizes': [40, 50],
'name': '/delivery_provider_seamless_20180129.png'}}},
'photos': { 'count': 0, 'groups': []},
'venuePage': { 'id': '94591483'}},
'referralId': 'e-0-4b427919f964a52093d425e3-12'},
{'reasons': { 'count': 0,
'items': [{ 'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},

```

```

'venue': {'id': '553ffa91498e2c76f06c0c03',
'name': 'SVL Bar',
'location': {'address': '30-18 Astoria Blvd',
'lat': 40.76981639052601,
'lng': -73.91853012633574,
'labeledLatLngs': [{'label': 'display',
'lat': 40.76981639052601,
'lng': -73.91853012633574}]},
'distance': 282,
'postalCode': '11102',
'cc': 'US',
'neighborhood': 'Astoria',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['30-18 Astoria Blvd',
'Astoria, NY 11102',
'United States']},
'categories': [{'id': '4bf58dd8d48988d10e941735',
'name': 'Greek Restaurant',
'pluralName': 'Greek Restaurants',
'shortName': 'Greek',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/gree
k_',
'suffix': '.png'},
'primary': True}],
'delivery': {'id': '318891',
'url': 'https://www.seamless.com/menu/svl-souvlaki-bar-3018-astoria-b
lvd-astoria/318891?affiliate=1131&utm_source=foursquare-affiliate-network&utm
_medium=affiliate&utm_campaign=1131&utm_content=318891',
'provider': {'name': 'seamless',
'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
'sizes': [40, 50],
'name': '/delivery_provider_seamless_20180129.png'}}},
'photos': {'count': 0, 'groups': []},
'venuePage': {'id': '127155030'}},
'referralId': 'e-0-553ffa91498e2c76f06c0c03-13'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': {'id': '5ae115d7c84d18002393461a',
'name': 'Ample Hills Creamery',
'location': {'address': '34-02 30th Ave',
'crossStreet': '34th St',
'lat': 40.765562,
'lng': -73.919012,
'labeledLatLngs': [{'label': 'display',
'lat': 40.765562,
'lng': -73.919012}]},
'distance': 433,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['34-02 30th Ave (34th St)',

```

```

'Astoria, NY 11103',
'United States']},
'categories': [{ 'id': '4bf58dd8d48988d1c9941735',
'name': 'Ice Cream Shop',
'pluralName': 'Ice Cream Shops',
'shortName': 'Ice Cream',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/icecream_',
'suffix': '.png'},
'primary': True}],
'photos': { 'count': 0, 'groups': []},
'referralId': 'e-0-5ae115d7c84d18002393461a-14'},
{'reasons': { 'count': 0,
'items': [{ 'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': { 'id': '5a0dfb3b916bc10c346d133a',
'name': 'AbuQir Seafood',
'location': { 'address': '24-19 Steinway St',
'crossStreet': 'btwn 25th Ave & Astoria Blvd',
'lat': 40.7685767076706,
'lng': -73.91116896112395,
'labeledLatLngs': [{ 'label': 'display',
'lat': 40.7685767076706,
'lng': -73.91116896112395}],
'distance': 378,
'postalCode': '11103',
'cc': 'US',
'city': 'Queens',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['24-19 Steinway St (btwn 25th Ave & Astoria Blvd)',
'Queens, NY 11103',
'United States']},
'categories': [{ 'id': '4bf58dd8d48988d1ce941735',
'name': 'Seafood Restaurant',
'pluralName': 'Seafood Restaurants',
'shortName': 'Seafood',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/seafood_',
'suffix': '.png'},
'primary': True}],
'photos': { 'count': 0, 'groups': []},
'referralId': 'e-0-5a0dfb3b916bc10c346d133a-15'},
{'reasons': { 'count': 0,
'items': [{ 'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': { 'id': '509eb60fe4b0872dbd6b1467',
'name': "Leli's Bakery and Pastry Shop",
'location': { 'address': '35-14 30th Ave',
'lat': 40.76513213736737,
'lng': -73.91769587859852,
'labeledLatLngs': [{ 'label': 'display',
'lat': 40.76513213736737,
'lng': -73.91769587859852}],

```



```

'distance': 413,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['35-14 30th Ave',
'Astoria, NY 11103',
'United States']],
'categories': [{'id': '4bf58dd8d48988d16a941735',
'name': 'Bakery',
'pluralName': 'Bakeries',
'shortName': 'Bakery',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/bake
ry_',
'suffix': '.png'},
'primary': True}],
'photos': {'count': 0, 'groups': []},
'referralId': 'e-0-509eb60fe4b0872dbd6b1467-16'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': {'id': '4af4ad4ef964a520fef421e3',
'name': 'GiGi Salon Styling Studio - Aveda Concept Salon',
'location': {'address': '34-17 30th Ave.',
'crossStreet': '34th Street',
'lat': 40.765707,
'lng': -73.918851,
'labeledLatLngs': [{'label': 'display',
'lat': 40.765707,
'lng': -73.918851}],
'distance': 412,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['34-17 30th Ave. (34th Street)',
'Astoria, NY 11103',
'United States']],
'categories': [{'id': '54541900498ea6ccd0202697',
'name': 'Health & Beauty Service',
'pluralName': 'Health & Beauty Services',
'shortName': 'Health & Beauty',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/sal
on_barber_',
'suffix': '.png'},
'primary': True}],
'photos': {'count': 0, 'groups': []},
'venuePage': {'id': '47094278'}},
'referralId': 'e-0-4af4ad4ef964a520fef421e3-17'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': {'id': '4a411c15f964a520c7a41fe3',

```

```

'name': 'Brooklyn Bagel & Coffee Co.',
'location': {'address': '3614 30th Ave',
'crossStreet': 'btwn 36th & 37th St',
'lat': 40.76473187132709,
'lng': -73.91694395951342,
'labeledLatLngs': [{'label': 'display',
'lat': 40.76473187132709,
'lng': -73.91694395951342}]},
'distance': 434,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['3614 30th Ave (btwn 36th & 37th St)',
'Astoria, NY 11103',
'United States']},
'categories': [{'id': '4bf58dd8d48988d179941735',
'name': 'Bagel Shop',
'pluralName': 'Bagel Shops',
'shortName': 'Bagels',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/bage
ls_',
'suffix': '.png'},
'primary': True}],
'photos': {'count': 0, 'groups': []}},
'referralId': 'e-0-4a411c15f964a520c7a41fe3-18'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]}},
'venue': {'id': '40da1980f964a5206c011fe3',
'name': 'Neptune Diner',
'location': {'address': '31-05 Astoria Blvd',
'crossStreet': 'at 31st St',
'lat': 40.77078768729911,
'lng': -73.91688990608493,
'labeledLatLngs': [{'label': 'display',
'lat': 40.77078768729911,
'lng': -73.91688990608493}]},
'distance': 274,
'postalCode': '11102',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['31-05 Astoria Blvd (at 31st St)',
'Astoria, NY 11102',
'United States']},
'categories': [{'id': '4bf58dd8d48988d147941735',
'name': 'Diner',
'pluralName': 'Diners',
'shortName': 'Diner',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/dine
r_',
'suffix': '.png'},
'primary': True}],

```

```

'delivery': {'id': '304960',
'url': 'https://www.seamless.com/menu/neptune-diner-31-05-astoria-blvd-new-york/304960?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=affiliate&utm_campaign=1131&utm_content=304960',
'provider': {'name': 'seamless',
'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
'sizes': [40, 50],
'name': '/delivery_provider_seamless_20180129.png'}}},
'photos': {'count': 0, 'groups': []},
'referralId': 'e-0-40da1980f964a5206c011fe3-19'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': {'id': '59595e89f4b5252a6744f8c3',
'name': 'Chip',
'location': {'address': '30-06 34th St',
'crossStreet': 'at 30th Ave',
'lat': 40.76558816210546,
'lng': -73.91914421375938,
'labeledLatLngs': [{'label': 'display',
'lat': 40.76558816210546,
'lng': -73.91914421375938}]},
'distance': 438,
'postalCode': '11103',
'cc': 'US',
'city': 'New York',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['30-06 34th St (at 30th Ave)',
'New York, NY 11103',
'United States']},
'categories': [{'id': '4bf58dd8d48988d1d0941735',
'name': 'Dessert Shop',
'pluralName': 'Dessert Shops',
'shortName': 'Desserts',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/dessert_',
'suffix': '.png'},
'primary': True}],
'photos': {'count': 0, 'groups': []},
'referralId': 'e-0-59595e89f4b5252a6744f8c3-20'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': {'id': '4e6aa7f6b0fb8b8a844e3ce5',
'name': 'Create & Go',
'location': {'address': '36-03 30th Ave',
'crossStreet': 'btwn 36th & 37th St.',
'lat': 40.76502149198756,
'lng': -73.91717205518748,
'labeledLatLngs': [{'label': 'display',
'lat': 40.76502149198756,
'lng': -73.91717205518748}]},
'distance': 408,
'postalCode': '11103',

```

```

    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['36-03 30th Ave (btwn 36th & 37th St.)',
    'Astoria, NY 11103',
    'United States']},
    'categories': [{ 'id': '4bf58dd8d48988d1bd941735',
    'name': 'Salad Place',
    'pluralName': 'Salad Places',
    'shortName': 'Salad',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/sala
d_',
    'suffix': '.png'},
    'primary': True}],
    'delivery': { 'id': '259849',
    'url': 'https://www.seamless.com/menu/create-30th-ave-36-03-30th-ave-
astoria/259849?affiliate=1131&utm_source=foursquare-affiliate-network&utm_med
ium=affiliate&utm_campaign=1131&utm_content=259849',
    'provider': { 'name': 'seamless',
    'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
    'sizes': [40, 50],
    'name': '/delivery_provider_seamless_20180129.png' } }},
    'photos': { 'count': 0, 'groups': [] },
    'referralId': 'e-0-4e6aa7f6b0fb8b8a844e3ce5-21'},
    { 'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason' } ] },
    'venue': { 'id': '4aa56c81f964a5204e4820e3',
    'name': 'Seva Indian Cuisine',
    'location': { 'address': '30-07 34th St',
    'crossStreet': 'btwn 30th & 31st Ave.',
    'lat': 40.76552091157529,
    'lng': -73.91915721566768,
    'labeledLatLngs': [{ 'label': 'display',
    'lat': 40.76552091157529,
    'lng': -73.91915721566768 } ] },
    'distance': 444,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['30-07 34th St (btwn 30th & 31st Ave.)',
    'Astoria, NY 11103',
    'United States'] },
    'categories': [{ 'id': '4bf58dd8d48988d10f941735',
    'name': 'Indian Restaurant',
    'pluralName': 'Indian Restaurants',
    'shortName': 'Indian',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/indi
an_',
    'suffix': '.png'},
    'primary': True } ],
    'delivery': { 'id': '71405',
    'url': 'https://www.seamless.com/menu/seva-indian-cuisine-30-07-34th-

```

```

st-astoria/71405?affiliate=1131&utm_source=foursquare-affiliate-network&utm_m
edium=affiliate&utm_campaign=1131&utm_content=71405',
  'provider': {'name': 'seamless',
  'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
  'sizes': [40, 50],
  'name': '/delivery_provider_seamless_20180129.png'}}},
  'photos': {'count': 0, 'groups': []},
  'venuePage': {'id': '94541120'}},
  'referralId': 'e-0-4aa56c81f964a5204e4820e3-22'},
{'reasons': {'count': 0,
  'items': [{'summary': 'This spot is popular',
  'type': 'general',
  'reasonName': 'globalInteractionReason'}]}},
  'venue': {'id': '57fee854498e2fe6a134e544',
  'name': 'Pochana Thai Kitchen',
  'location': {'address': '33-16 30th Ave',
  'crossStreet': '34th street',
  'lat': 40.76586683618986,
  'lng': -73.91925648391081,
  'labeledLatLngs': [{'label': 'display',
  'lat': 40.76586683618986,
  'lng': -73.91925648391081}]},
  'distance': 422,
  'postalCode': '11103',
  'cc': 'US',
  'city': 'New York',
  'state': 'NY',
  'country': 'United States',
  'formattedAddress': ['33-16 30th Ave (34th street)',
  'New York, NY 11103',
  'United States']},
  'categories': [{'id': '4bf58dd8d48988d149941735',
  'name': 'Thai Restaurant',
  'pluralName': 'Thai Restaurants',
  'shortName': 'Thai',
  'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/thai
_ ',
  'suffix': '.png'},
  'primary': True}],
  'delivery': {'id': '344855',
  'url': 'https://www.seamless.com/menu/pochana-3316-30th-ave-new-york/
344855?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=affi
liate&utm_campaign=1131&utm_content=344855',
  'provider': {'name': 'seamless',
  'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
  'sizes': [40, 50],
  'name': '/delivery_provider_seamless_20180129.png'}}},
  'photos': {'count': 0, 'groups': []},
  'referralId': 'e-0-57fee854498e2fe6a134e544-23'},
{'reasons': {'count': 0,
  'items': [{'summary': 'This spot is popular',
  'type': 'general',
  'reasonName': 'globalInteractionReason'}]}},
  'venue': {'id': '4aa840a9f964a520665020e3',
  'name': 'Ovelia Psistaria Bar',
  'location': {'address': '3401 30th Ave',
  'crossStreet': 'at 34th St.',

```

```

'lat': 40.76577909596547,
'lng': -73.91889019570948,
'labeledLatLngs': [{ 'label': 'display',
  'lat': 40.76577909596547,
  'lng': -73.91889019570948}],
'distance': 408,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['3401 30th Ave (at 34th St.)',
  'Astoria, NY 11103',
  'United States']],
'categories': [{ 'id': '4bf58dd8d48988d10e941735',
  'name': 'Greek Restaurant',
  'pluralName': 'Greek Restaurants',
  'shortName': 'Greek',
  'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/gree
k_',
    'suffix': '.png'},
  'primary': True}],
'delivery': { 'id': '82161',
  'url': 'https://www.seamless.com/menu/ovelvia-34-01-30th-ave-astoria/8
2161?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=affili
ate&utm_campaign=1131&utm_content=82161',
  'provider': { 'name': 'seamless',
    'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
      'sizes': [40, 50],
      'name': '/delivery_provider_seamless_20180129.png' } } },
'photos': { 'count': 0, 'groups': [] },
'venuePage': { 'id': '63060681' },
'referralId': 'e-0-4aa840a9f964a520665020e3-24'},
{'reasons': { 'count': 0,
  'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason' } ] },
'venue': { 'id': '4a9b0e2cf964a520373420e3',
  'name': 'Sweet Afton',
  'location': { 'address': '30-09 34th St',
    'crossStreet': 'btwn 30th & 31st Ave',
    'lat': 40.76535,
    'lng': -73.918983,
    'labeledLatLngs': [{ 'label': 'display',
      'lat': 40.76535,
      'lng': -73.918983 } ] },
    'distance': 449,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['30-09 34th St (btwn 30th & 31st Ave)',
      'Astoria, NY 11103',
      'United States' ] },
    'categories': [{ 'id': '4bf58dd8d48988d116941735',
      'name': 'Bar',

```

```

    'pluralName': 'Bars',
    'shortName': 'Bar',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/pub_',
      'suffix': '.png'},
    'primary': True}},
    'photos': {'count': 0, 'groups': []},
    'venuePage': {'id': '94617384'}},
    'referralId': 'e-0-4a9b0e2cf964a520373420e3-25'},
    {'reasons': {'count': 0,
      'items': [{'summary': 'This spot is popular',
        'type': 'general',
        'reasonName': 'globalInteractionReason'}]}},
    'venue': {'id': '4bef6fedc80dc92897fe27e3',
      'name': 'El Rey Del Taco Truck',
      'location': {'address': '33-01 30th Ave',
        'crossStreet': '33rd St - In front of Rite Aid',
        'lat': 40.76614245155593,
        'lng': -73.91954910974971,
        'labeledLatLngs': [{'label': 'display',
          'lat': 40.76614245155593,
          'lng': -73.91954910974971}]},
        'distance': 420,
        'postalCode': '11103',
        'cc': 'US',
        'city': 'Astoria',
        'state': 'NY',
        'country': 'United States',
        'formattedAddress': ['33-01 30th Ave (33rd St - In front of Rite Ai
d)',
        'Astoria, NY 11103',
        'United States']},
      'categories': [{'id': '4bf58dd8d48988d1cb941735',
        'name': 'Food Truck',
        'pluralName': 'Food Trucks',
        'shortName': 'Food Truck',
        'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/stre
etfood_',
          'suffix': '.png'},
          'primary': True}},
        'photos': {'count': 0, 'groups': []}},
        'referralId': 'e-0-4bef6fedc80dc92897fe27e3-26'},
        {'reasons': {'count': 0,
          'items': [{'summary': 'This spot is popular',
            'type': 'general',
            'reasonName': 'globalInteractionReason'}]}},
          'venue': {'id': '589564fb000bef635d8c9134',
            'name': 'Bonjour Crêpes & Wine',
            'location': {'address': '34-10 30th Ave',
              'lat': 40.765552941874006,
              'lng': -73.91871245031112,
              'labeledLatLngs': [{'label': 'display',
                'lat': 40.765552941874006,
                'lng': -73.91871245031112}]},
                'distance': 418,
                'postalCode': '11103',
                'cc': 'US',

```

```

'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['34-10 30th Ave',
'Astoria, NY 11103',
'United States']},
'categories': [{ 'id': '52e81612bcb57f1066b79f2',
'name': 'Creperie',
'pluralName': 'Creperies',
'shortName': 'Creperie',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/crep
erie_',
'suffix': '.png'},
'primary': True}],
'delivery': { 'id': '353256',
'url': 'https://www.seamless.com/menu/bonjour-crepes--wine-34-10-30th
-ave-new-york/353256?affiliate=1131&utm_source=foursquare-affiliate-network&u
tm_medium=affiliate&utm_campaign=1131&utm_content=353256',
'provider': { 'name': 'seamless',
'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
'sizes': [40, 50],
'name': '/delivery_provider_seamless_20180129.png'}}},
'photos': { 'count': 0, 'groups': []},
'referralId': 'e-0-589564fb000bef635d8c9134-27'},
{'reasons': { 'count': 0,
'items': [{ 'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': { 'id': '4df92f12e4cd56a64982415f',
'name': 'Basil Brick Oven Pizza',
'location': { 'address': '28-17 Astoria Blvd',
'lat': 40.77086476023009,
'lng': -73.92008026388999,
'labeledLatLngs': [{ 'label': 'display',
'lat': 40.77086476023009,
'lng': -73.92008026388999}],
'distance': 456,
'postalCode': '11102',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['28-17 Astoria Blvd',
'Astoria, NY 11102',
'United States']},
'categories': [{ 'id': '4bf58dd8d48988d1ca941735',
'name': 'Pizza Place',
'pluralName': 'Pizza Places',
'shortName': 'Pizza',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/pizz
a_',
'suffix': '.png'},
'primary': True}],
'delivery': { 'id': '334059',
'url': 'https://www.seamless.com/menu/basil-brick-oven-pizza-28-17-as
toria-blvd-astoria/334059?affiliate=1131&utm_source=foursquare-affiliate-netw
ork&utm_medium=affiliate&utm_campaign=1131&utm_content=334059',

```



```

    'provider': {'name': 'seamless',
    'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
    'sizes': [40, 50],
    'name': '/delivery_provider_seamless_20180129.png'}}},
    'photos': {'count': 0, 'groups': []},
    'venuePage': {'id': '144538295'}},
    'referralId': 'e-0-4df92f12e4cd56a64982415f-28'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]}},
    'venue': {'id': '4ae08768f964a520048021e3',
    'name': 'United Brothers Fruit Markets',
    'location': {'address': '32-24 30th Ave',
    'crossStreet': '33rd St.',
    'lat': 40.76617826348878,
    'lng': -73.91993202386998,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.76617826348878,
    'lng': -73.91993202386998}]},
    'distance': 444,
    'postalCode': '11102',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['32-24 30th Ave (33rd St.)',
    'Astoria, NY 11102',
    'United States']},
    'categories': [{'id': '4bf58dd8d48988d118951735',
    'name': 'Grocery Store',
    'pluralName': 'Grocery Stores',
    'shortName': 'Grocery Store',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/food_grocery_',
    'suffix': '.png'},
    'primary': True}]},
    'photos': {'count': 0, 'groups': []},
    'venuePage': {'id': '116435975'}},
    'referralId': 'e-0-4ae08768f964a520048021e3-29'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]}},
    'venue': {'id': '54a74b89498ee74ea18cd564',
    'name': 'Jujube Tree',
    'location': {'address': '35-02 30th Ave',
    'lat': 40.76530893055949,
    'lng': -73.91816151712001,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.76530893055949,
    'lng': -73.91816151712001}]},
    'distance': 414,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',

```

```

    'country': 'United States',
    'formattedAddress': ['35-02 30th Ave',
    'Astoria, NY 11103',
    'United States']},
    'categories': [{'id': '4bf58dd8d48988d1d3941735',
    'name': 'Vegetarian / Vegan Restaurant',
    'pluralName': 'Vegetarian / Vegan Restaurants',
    'shortName': 'Vegetarian / Vegan',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/vegetarian_',
    'suffix': '.png'},
    'primary': True}],
    'delivery': {'id': '302007',
    'url': 'https://www.seamless.com/menu/jujube-tree-3502-30th-ave-astoria/302007?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=affiliate&utm_campaign=1131&utm_content=302007',
    'provider': {'name': 'seamless',
    'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
    'sizes': [40, 50],
    'name': '/delivery_provider_seamless_20180129.png'}}},
    'photos': {'count': 0, 'groups': []},
    'referralId': 'e-0-54a74b89498ee74ea18cd564-30'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': {'id': '4ba406b6f964a520317938e3',
    'name': 'Crave Astoria',
    'location': {'address': '2855 36th St.',
    'crossStreet': 'at 30th Ave.',
    'lat': 40.76526592389782,
    'lng': -73.91717258584941,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.76526592389782,
    'lng': -73.91717258584941}]},
    'distance': 383,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['2855 36th St. (at 30th Ave.)',
    'Astoria, NY 11103',
    'United States']},
    'categories': [{'id': '4bf58dd8d48988d10e941735',
    'name': 'Greek Restaurant',
    'pluralName': 'Greek Restaurants',
    'shortName': 'Greek',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/greek_',
    'suffix': '.png'},
    'primary': True}],
    'delivery': {'id': '92900',
    'url': 'https://www.seamless.com/menu/crave-28-55-36th-st-astoria/92900?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=affiliate&utm_campaign=1131&utm_content=92900',
    'provider': {'name': 'seamless',

```

```

    'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
      'sizes': [40, 50],
      'name': '/delivery_provider_seamless_20180129.png'}}},
    'photos': {'count': 0, 'groups': []},
    'venuePage': {'id': '74014781'}},
    'referralId': 'e-0-4ba406b6f964a520317938e3-31'},
    {'reasons': {'count': 0,
      'items': [{'summary': 'This spot is popular',
        'type': 'general',
        'reasonName': 'globalInteractionReason'}]}},
    'venue': {'id': '5a26ff7fda7080210c210240',
      'name': 'The Astorian',
      'location': {'address': '28-50 31st St',
        'lat': 40.76731385263897,
        'lng': -73.92120974323126,
        'labeledLatLngs': [{'label': 'display',
          'lat': 40.76731385263897,
          'lng': -73.92120974323126}]},
      'distance': 486,
      'postalCode': '11102',
      'cc': 'US',
      'city': 'Astoria',
      'state': 'NY',
      'country': 'United States',
      'formattedAddress': ['28-50 31st St',
        'Astoria, NY 11102',
        'United States']},
      'categories': [{'id': '4bf58dd8d48988d11b941735',
        'name': 'Pub',
        'pluralName': 'Pubs',
        'shortName': 'Pub',
        'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/pub_',
          'suffix': '.png'},
          'primary': True}],
      'delivery': {'id': '275445',
        'url': 'https://www.seamless.com/menu/astoria-pizzeria-32-04-30th-ave
-astoria/275445?affiliate=1131&utm_source=foursquare-affiliate-network&utm_me
dium=affiliate&utm_campaign=1131&utm_content=275445',
        'provider': {'name': 'seamless',
          'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
            'sizes': [40, 50],
            'name': '/delivery_provider_seamless_20180129.png'}}},
          'photos': {'count': 0, 'groups': []},
          'venuePage': {'id': '468717369'}},
          'referralId': 'e-0-5a26ff7fda7080210c210240-32'},
          {'reasons': {'count': 0,
            'items': [{'summary': 'This spot is popular',
              'type': 'general',
              'reasonName': 'globalInteractionReason'}]}},
            'venue': {'id': '5931f9fc9fca567dcb6d4295',
              'name': 'The Grand',
              'location': {'address': 'Former Location Of Grand Cafe',
                'lat': 40.76464937398527,
                'lng': -73.91645981481022,
                'labeledLatLngs': [{'label': 'display',
                  'lat': 40.76464937398527,

```

```

    'lng': -73.91645981481022}],
    'distance': 434,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['Former Location Of Grand Cafe',
    'Astoria, NY 11103',
    'United States']],
    'categories': [{ 'id': '4bf58dd8d48988d1c0941735',
    'name': 'Mediterranean Restaurant',
    'pluralName': 'Mediterranean Restaurants',
    'shortName': 'Mediterranean',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/medi
terreanean_',
    'suffix': '.png'},
    'primary': True}],
    'delivery': { 'id': '508317',
    'url': 'https://www.seamless.com/menu/the-grand-37-01-30th-ave-new-yo
rk/508317?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=a
ffiliate&utm_campaign=1131&utm_content=508317',
    'provider': { 'name': 'seamless',
    'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
    'sizes': [40, 50],
    'name': '/delivery_provider_seamless_20180129.png' } }},
    'photos': { 'count': 0, 'groups': [] },
    'referralId': 'e-0-5931f9fc9fca567dcb6d4295-33'},
    { 'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason' } ] },
    'venue': { 'id': '56c7b992cd10ae6f3f473088',
    'name': 'Cold Stone Creamery',
    'location': { 'address': '2598 Steinway St, Fl 1',
    'lat': 40.765696,
    'lng': -73.913778,
    'labeledLatLngs': [{ 'label': 'display',
    'lat': 40.765696,
    'lng': -73.913778 } ] },
    'distance': 350,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['2598 Steinway St, Fl 1',
    'Astoria, NY 11103',
    'United States' ] },
    'categories': [{ 'id': '4bf58dd8d48988d1c9941735',
    'name': 'Ice Cream Shop',
    'pluralName': 'Ice Cream Shops',
    'shortName': 'Ice Cream',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/icec
ream_',
    'suffix': '.png'},
    'primary': True } ] },

```

```

'delivery': {'id': '323210',
'url': 'https://www.seamless.com/menu/cold-stone-creamery--the-origin
al-soupman-2598-steinway-st-astoria/323210?affiliate=1131&utm_source=foursqua
re-affiliate-network&utm_medium=affiliate&utm_campaign=1131&utm_content=32321
0',

```

```

'provider': {'name': 'seamless',
'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
'sizes': [40, 50],
'name': '/delivery_provider_seamless_20180129.png'}}},
'photos': {'count': 0, 'groups': []},
'referralId': 'e-0-56c7b992cd10ae6f3f473088-34'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': {'id': '4b6dd7d4f964a520e1942ce3',
'name': 'International Meat Market',
'location': {'address': '36-12 30th Ave',
'crossStreet': '36 and 37',
'lat': 40.764840408369444,
'lng': -73.91699962138938,
'labeledLatLngs': [{'label': 'display',
'lat': 40.764840408369444,
'lng': -73.91699962138938}],
'distance': 423,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['36-12 30th Ave (36 and 37)',
'Astoria, NY 11103',
'United States']},
'categories': [{'id': '4d4b7105d754a06374d81259',
'name': 'Food',
'pluralName': 'Food',
'shortName': 'Food',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/defa

```

```

ult_',
'suffix': '.png'},
'primary': True}},
'photos': {'count': 0, 'groups': []},
'venuePage': {'id': '95428646'}},
'referralId': 'e-0-4b6dd7d4f964a520e1942ce3-35'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': {'id': '4ca27a1ba73cb60c45961078',
'name': 'Mediterranean Foods',
'location': {'lat': 40.76557879518834,
'lng': -73.91912280094809,
'labeledLatLngs': [{'label': 'display',
'lat': 40.76557879518834,
'lng': -73.91912280094809}],
'distance': 438,
'postalCode': '11103',

```

```

    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['Astoria, NY 11103', 'United States']],
    'categories': [{ 'id': '4bf58dd8d48988d1f9941735',
    'name': 'Food & Drink Shop',
    'pluralName': 'Food & Drink Shops',
    'shortName': 'Food & Drink',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/foodanddrink_',
    'suffix': '.png'},
    'primary': True}],
    'photos': { 'count': 0, 'groups': []}},
    'referralId': 'e-0-4ca27a1ba73cb60c45961078-36'},
    { 'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': { 'id': '5c0db9ecbfc6d0002c85e28e',
    'name': 'Kal',
    'location': { 'address': '34-05 30th Ave',
    'lat': 40.76575,
    'lng': -73.91871,
    'labeledLatLngs': [{ 'label': 'display',
    'lat': 40.76575,
    'lng': -73.91871}],
    'distance': 400,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['34-05 30th Ave',
    'Astoria, NY 11103',
    'United States']}},
    'categories': [{ 'id': '4bf58dd8d48988d113941735',
    'name': 'Korean Restaurant',
    'pluralName': 'Korean Restaurants',
    'shortName': 'Korean',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/korean_',
    'suffix': '.png'},
    'primary': True}],
    'delivery': { 'id': '414817',
    'url': 'https://www.seamless.com/menu/kal-34-05-30th-ave-astoria/414817?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=affiliate&utm_campaign=1131&utm_content=414817',
    'provider': { 'name': 'seamless',
    'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
    'sizes': [40, 50],
    'name': '/delivery_provider_seamless_20180129.png'}}},
    'photos': { 'count': 0, 'groups': []}},
    'referralId': 'e-0-5c0db9ecbfc6d0002c85e28e-37'},
    { 'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',

```

```

    'reasonName': 'globalInteractionReason']]],
'venu': {'id': '5010b169e4b05edd9983ec7d',
'name': 'Antika Restaurant & Pizzeria',
'location': {'address': '36-08 30th Ave',
'crossStreet': 'at 36th St',
'lat': 40.764903413035924,
'lng': -73.91715814610242,
'labeledLatLngs': [{'label': 'display',
'lat': 40.764903413035924,
'lng': -73.91715814610242}]},
'distance': 420,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['36-08 30th Ave (at 36th St)',
'Astoria, NY 11103',
'United States']},
'categories': [{'id': '4bf58dd8d48988d110941735',
'name': 'Italian Restaurant',
'pluralName': 'Italian Restaurants',
'shortName': 'Italian',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/ital
ian_',
'suffix': '.png'},
'primary': True}],
'delivery': {'id': '951225',
'url': 'https://www.seamless.com/menu/antika-pizzeria-3608-30th-ave-a
storia/951225?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medi
um=affiliate&utm_campaign=1131&utm_content=951225',
'provider': {'name': 'seamless',
'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
'sizes': [40, 50],
'name': '/delivery_provider_seamless_20180129.png'}}},
'photos': {'count': 0, 'groups': []},
'venuPage': {'id': '81973481'}},
'referralId': 'e-0-5010b169e4b05edd9983ec7d-38'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason']]],
'venu': {'id': '51a583d5498e61376f990216',
'name': 'Farid Kebab, Steinway',
'location': {'address': '25-15 Steinway St',
'lat': 40.767548,
'lng': -73.911972,
'labeledLatLngs': [{'label': 'display',
'lat': 40.767548,
'lng': -73.911972}]},
'distance': 328,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['25-15 Steinway St',

```

le_',


```

'distance': 408,
'postalCode': '11102',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['2818 31st St (at Newtown Ave.)',
'Astoria, NY 11102',
'United States']],
'categories': [{ 'id': '4bf58dd8d48988d1be941735',
'name': 'Latin American Restaurant',
'pluralName': 'Latin American Restaurants',
'shortName': 'Latin American',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/lati
namerican_',
'suffix': '.png'},
'primary': True}],
'delivery': { 'id': '292331',
'url': 'https://www.seamless.com/menu/don-coqui-28-18-31st-st-astori
a/292331?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=af
filiate&utm_campaign=1131&utm_content=292331',
'provider': { 'name': 'seamless',
'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
'sizes': [40, 50],
'name': '/delivery_provider_seamless_20180129.png' } } },
'photos': { 'count': 0, 'groups': [] },
'venuePage': { 'id': '48613323' },
'referralId': 'e-0-4e83d877d22db0f42c745b13-41',
{'reasons': { 'count': 0,
'items': [{ 'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason' } ] },
'venue': { 'id': '59f3b0a2dee770670b00c0a1',
'name': 'Gyro World',
'location': { 'address': '3602 30th Ave',
'crossStreet': '36th St',
'lat': 40.764894884709804,
'lng': -73.91744608778997,
'labeledLatLngs': [{ 'label': 'display',
'lat': 40.764894884709804,
'lng': -73.91744608778997 } ] },
'distance': 429,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['3602 30th Ave (36th St)',
'Astoria, NY 11103',
'United States']],
'categories': [{ 'id': '4bf58dd8d48988d10e941735',
'name': 'Greek Restaurant',
'pluralName': 'Greek Restaurants',
'shortName': 'Greek',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/gree
k_',
'suffix': '.png'},

```

```

    'primary': True]],
    'delivery': {'id': '624968',
    'url': 'https://www.seamless.com/menu/gyro-world-astoria-3602-30th-av
e-long-island-city/624968?affiliate=1131&utm_source=foursquare-affiliate-netw
ork&utm_medium=affiliate&utm_campaign=1131&utm_content=624968',
    'provider': {'name': 'seamless',
    'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
    'sizes': [40, 50],
    'name': '/delivery_provider_seamless_20180129.png'}}},
    'photos': {'count': 0, 'groups': []}},
    'referralId': 'e-0-59f3b0a2dee770670b00c0a1-42'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': {'id': '4f81cc8be4b0a6d0b766ce67',
    'name': 'New York Bakery Café',
    'location': {'address': '32-06 30th Ave, Queens, NY 11102',
    'lat': 40.766443220617624,
    'lng': -73.92034069362454,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.766443220617624,
    'lng': -73.92034069362454}]},
    'distance': 457,
    'postalCode': '11102',
    'cc': 'US',
    'city': 'Jackson Heights',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['32-06 30th Ave, Queens, NY 11102',
    'Jackson Heights, NY 11102',
    'United States']},
    'categories': [{'id': '4bf58dd8d48988d16a941735',
    'name': 'Bakery',
    'pluralName': 'Bakeries',
    'shortName': 'Bakery',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/bake
ry_',
    'suffix': '.png'},
    'primary': True]],
    'photos': {'count': 0, 'groups': []}},
    'referralId': 'e-0-4f81cc8be4b0a6d0b766ce67-43'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': {'id': '428bd700f964a5209c231fe3',
    'name': 'The Sparrow Tavern',
    'location': {'address': '24-01 29th St',
    'crossStreet': 'at 24th Ave',
    'lat': 40.772935367519025,
    'lng': -73.91645686322842,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.772935367519025,
    'lng': -73.91645686322842}]},
    'distance': 497,
    'postalCode': '11102',

```

```

'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['24-01 29th St (at 24th Ave)',
'Astoria, NY 11102',
'United States']],
'categories': [{ 'id': '4bf58dd8d48988d116941735',
'name': 'Bar',
'pluralName': 'Bars',
'shortName': 'Bar',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/pub_',
'suffix': '.png'},
'primary': True}],
'photos': { 'count': 0, 'groups': [] },
'referralId': 'e-0-428bd700f964a5209c231fe3-44'},
{ 'reasons': { 'count': 0,
'items': [{ 'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason' } ] },
'venue': { 'id': '3fd66200f964a52008f11ee3',
'name': 'Bohemian Hall & Beer Garden',
'location': { 'address': '29-19 24th Ave',
'crossStreet': 'btwn 29th & 31st St',
'lat': 40.77298079076918,
'lng': -73.91598000312119,
'labeledLatLngs': [{ 'label': 'display',
'lat': 40.77298079076918,
'lng': -73.91598000312119 } ] },
'distance': 498,
'postalCode': '11102',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['29-19 24th Ave (btwn 29th & 31st St)',
'Astoria, NY 11102',
'United States']],
'categories': [{ 'id': '4bf58dd8d48988d117941735',
'name': 'Beer Garden',
'pluralName': 'Beer Gardens',
'shortName': 'Beer Garden',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/beergarden_',
'suffix': '.png'},
'primary': True}],
'delivery': { 'id': '1015643',
'url': 'https://www.seamless.com/menu/bohemian-hall-and-beer-garden-2
919-24th-ave-astoria/1015643?affiliate=1131&utm_source=foursquare-affiliate-n
etwork&utm_medium=affiliate&utm_campaign=1131&utm_content=1015643',
'provider': { 'name': 'seamless',
'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
'sizes': [40, 50],
'name': '/delivery_provider_seamless_20180129.png' } } },
'photos': { 'count': 0, 'groups': [] },
'venuePage': { 'id': '79605244' } },

```

```

'referralId': 'e-0-3fd66200f964a52008f11ee3-45'},
{'reasons': {'count': 0,
  'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason' } ] },
'venuce': {'id': '51284f34e4b0ac94e6be0e9c',
  'name': 'The Shady Lady',
  'location': {'address': '34-19 30th Ave',
    'crossStreet': 'at 35th St',
    'lat': 40.76544120609521,
    'lng': -73.91815954100994,
    'labeledLatLngs': [{ 'label': 'display',
      'lat': 40.76544120609521,
      'lng': -73.91815954100994 } ] },
  'distance': 401,
  'postalCode': '11103',
  'cc': 'US',
  'city': 'Astoria',
  'state': 'NY',
  'country': 'United States',
  'formattedAddress': [ '34-19 30th Ave (at 35th St)',
    'Astoria, NY 11103',
    'United States' ] },
'categories': [{ 'id': '4bf58dd8d48988d116941735',
  'name': 'Bar',
  'pluralName': 'Bars',
  'shortName': 'Bar',
  'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/pub_',
    'suffix': '.png' },
  'primary': True } ] },
'delivery': {'id': '299715',
  'url': 'https://www.seamless.com/menu/the-shady-lady-34-19-30th-ave-a
storia/299715?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medi
um=affiliate&utm_campaign=1131&utm_content=299715',
  'provider': { 'name': 'seamless',
    'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
      'sizes': [40, 50],
      'name': '/delivery_provider_seamless_20180129.png' } } },
'photos': { 'count': 0, 'groups': [ ] },
'venucePage': { 'id': '106749907' } },
'referralId': 'e-0-51284f34e4b0ac94e6be0e9c-46'},
{'reasons': {'count': 0,
  'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason' } ] },
'venuce': {'id': '53fd1167498e3277ac80d4f1',
  'name': 'Judy & Punch',
  'location': {'address': '34-08 30th Ave',
    'crossStreet': '34th Street',
    'lat': 40.76558788660594,
    'lng': -73.91878697297321,
    'labeledLatLngs': [{ 'label': 'display',
      'lat': 40.76558788660594,
      'lng': -73.91878697297321 } ] },
  'distance': 418,
  'postalCode': '11103',

```

```

    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['34-08 30th Ave (34th Street)',
    'Astoria, NY 11103',
    'United States']},
    'categories': [{ 'id': '4bf58dd8d48988d116941735',
    'name': 'Bar',
    'pluralName': 'Bars',
    'shortName': 'Bar',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/pub_',
    'suffix': '.png'},
    'primary': True}],
    'photos': { 'count': 0, 'groups': []}},
    'referralId': 'e-0-53fd1167498e3277ac80d4f1-47'},
    { 'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': { 'id': '5956bf3ff427de4e1b343678',
    'name': 'Sugar Freak',
    'location': { 'address': '37-11 30th Ave',
    'lat': 40.764443337202955,
    'lng': -73.91605469466285,
    'labeledLatLngs': [{ 'label': 'display',
    'lat': 40.764443337202955,
    'lng': -73.91605469466285}],
    'distance': 453,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['37-11 30th Ave',
    'Astoria, NY 11103',
    'United States']},
    'categories': [{ 'id': '4bf58dd8d48988d17a941735',
    'name': 'Cajun / Creole Restaurant',
    'pluralName': 'Cajun / Creole Restaurants',
    'shortName': 'Cajun / Creole',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/caju
n_',
    'suffix': '.png'},
    'primary': True}],
    'photos': { 'count': 0, 'groups': []}},
    'referralId': 'e-0-5956bf3ff427de4e1b343678-48'},
    { 'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': { 'id': '4eac90c6dab4a75e09bfbfd41',
    'name': 'Butcher Bar',
    'location': { 'address': '37-10 30th Ave',
    'crossStreet': 'at 37th St.',
    'lat': 40.76443654357215,

```

```

'lng': -73.91627777034051,
'labeledLatLngs': [{ 'label': 'display',
  'lat': 40.76443654357215,
  'lng': -73.91627777034051}],
'distance': 456,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['37-10 30th Ave (at 37th St.)',
  'Astoria, NY 11103',
  'United States']],
'categories': [{ 'id': '4bf58dd8d48988d1df931735',
  'name': 'BBQ Joint',
  'pluralName': 'BBQ Joints',
  'shortName': 'BBQ',
  'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/bbqa
lt_',
    'suffix': '.png'},
    'primary': True}],
'delivery': { 'id': '274923',
  'url': 'https://www.seamless.com/menu/butcher-bar-37-10-30th-ave-asto
ria/274923?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=
affiliate&utm_campaign=1131&utm_content=274923',
  'provider': { 'name': 'seamless',
    'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
      'sizes': [40, 50],
      'name': '/delivery_provider_seamless_20180129.png' } } },
'photos': { 'count': 0, 'groups': [] },
'venuePage': { 'id': '48128220' },
'referralId': 'e-0-4eac90c6dab4a75e09bfbd41-49',
{'reasons': { 'count': 0,
  'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason' } ] },
'venue': { 'id': '4b5bd63af964a520051929e3',
  'name': 'Rotana',
  'location': { 'address': '2551A Steinway St',
    'lat': 40.76662090039591,
    'lng': -73.91250705632494,
    'labeledLatLngs': [{ 'label': 'display',
      'lat': 40.76662090039591,
      'lng': -73.91250705632494 } ] },
    'distance': 338,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['2551A Steinway St',
      'Astoria, NY 11103',
      'United States' ] },
    'categories': [{ 'id': '4bf58dd8d48988d119941735',
      'name': 'Hookah Bar',
      'pluralName': 'Hookah Bars',
      'shortName': 'Hookah Bar',

```

```

    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/hookahbar_',
    'suffix': '.png'},
    'primary': True}],
    'photos': {'count': 0, 'groups': []}},
    'referralId': 'e-0-4b5bd63af964a520051929e3-50'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]}},
    'venue': {'id': '58655a07761b1a5ec7af5882',
    'name': 'Koroni Souvlaki & Grill',
    'location': {'address': '29-37 Newtown Ave.',
    'lat': 40.76847401888144,
    'lng': -73.9211870791133,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.76847401888144,
    'lng': -73.9211870791133}]},
    'distance': 466,
    'cc': 'US',
    'neighborhood': 'Astoria',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['29-37 Newtown Ave.',
    'Astoria, NY',
    'United States']},
    'categories': [{'id': '52e81612bcb57f1066b79f3',
    'name': 'Souvlaki Shop',
    'pluralName': 'Souvlaki Shops',
    'shortName': 'Souvlaki',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/souv
laki_',
    'suffix': '.png'},
    'primary': True}],
    'delivery': {'id': '349277',
    'url': 'https://www.seamless.com/menu/koroni-souvlaki-and-grill-29-37
-newton-ave-astoria/349277?affiliate=1131&utm_source=foursquare-affiliate-net
work&utm_medium=affiliate&utm_campaign=1131&utm_content=349277',
    'provider': {'name': 'seamless',
    'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
    'sizes': [40, 50],
    'name': '/delivery_provider_seamless_20180129.png'}}},
    'photos': {'count': 0, 'groups': []}},
    'referralId': 'e-0-58655a07761b1a5ec7af5882-51'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]}},
    'venue': {'id': '4cfbd01cfeec6dcb8cbb4836',
    'name': 'Redken Salon',
    'location': {'address': '36-17 30th Ave',
    'crossStreet': '37th st',
    'lat': 40.76491925450276,
    'lng': -73.91657723389481,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.76491925450276,

```

```

    'lng': -73.91657723389481}],
    'distance': 407,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['36-17 30th Ave (37th st)',
    'Astoria, NY 11103',
    'United States']],
    'categories': [{ 'id': '4bf58dd8d48988d110951735',
    'name': 'Salon / Barbershop',
    'pluralName': 'Salons / Barbershops',
    'shortName': 'Salon / Barbershop',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/sal
on_barber_',
    'suffix': '.png'},
    'primary': True}],
    'photos': { 'count': 0, 'groups': []}],
    'referralId': 'e-0-4cfbd01cfeec6dcb8cbb4836-52'},
    { 'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason' } ]}],
    'venue': { 'id': '4a40db06f964a520a6a41fe3',
    'name': 'Layali Beirut',
    'location': { 'address': '25-60 Steinway St',
    'crossStreet': '28th Ave.',
    'lat': 40.766516467529115,
    'lng': -73.91295366864492,
    'labeledLatLngs': [{ 'label': 'display',
    'lat': 40.766516467529115,
    'lng': -73.91295366864492 } ]],
    'distance': 317,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['25-60 Steinway St (28th Ave.)',
    'Astoria, NY 11103',
    'United States']],
    'categories': [{ 'id': '4bf58dd8d48988d119941735',
    'name': 'Hookah Bar',
    'pluralName': 'Hookah Bars',
    'shortName': 'Hookah Bar',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/hookahbar_',
    'suffix': '.png'},
    'primary': True}],
    'photos': { 'count': 0, 'groups': []}],
    'referralId': 'e-0-4a40db06f964a520a6a41fe3-53'},
    { 'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason' } ]}],
    'venue': { 'id': '4b0b36a5f964a520cb2e23e3',

```



```

'name': 'Gyro Uno',
'location': {'address': '2801 Steinway St',
'lat': 40.76538015914801,
'lng': -73.91367349782698,
'labeledLatLngs': [{'label': 'display',
'lat': 40.76538015914801,
'lng': -73.91367349782698}]},
'distance': 386,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['2801 Steinway St',
'Astoria, NY 11103',
'United States']},
'categories': [{'id': '4bf58dd8d48988d10e941735',
'name': 'Greek Restaurant',
'pluralName': 'Greek Restaurants',
'shortName': 'Greek',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/gree
k_',
'suffix': '.png'},
'primary': True}],
'delivery': {'id': '273378',
'url': 'https://www.seamless.com/menu/gyro-uno-2801-steinway-st-astor
ia/273378?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=a
ffiliate&utm_campaign=1131&utm_content=273378',
'provider': {'name': 'seamless',
'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
'sizes': [40, 50],
'name': '/delivery_provider_seamless_20180129.png'}}},
'photos': {'count': 0, 'groups': []},
'venuePage': {'id': '89149934'}},
'referralId': 'e-0-4b0b36a5f964a520cb2e23e3-54'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': {'id': '5002febae4b09da8b06a3d3c',
'name': "That's A Wrap",
'location': {'address': '38-01 30th Ave',
'crossStreet': '38th Street',
'lat': 40.764192704714084,
'lng': -73.91556227941737,
'labeledLatLngs': [{'label': 'display',
'lat': 40.764192704714084,
'lng': -73.91556227941737}]},
'distance': 480,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['38-01 30th Ave (38th Street)',
'Astoria, NY 11103',
'United States']},

```

```

'categories': [{ 'id': '4bf58dd8d48988d1c5941735',
  'name': 'Sandwich Place',
  'pluralName': 'Sandwich Places',
  'shortName': 'Sandwiches',
  'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/deli
_ ',
    'suffix': '.png'},
    'primary': True}],
'delivery': { 'id': '270740',
  'url': 'https://www.seamless.com/menu/thats-a-wrap-3801-30th-ave-asto
ria/270740?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=
affiliate&utm_campaign=1131&utm_content=270740',
  'provider': { 'name': 'seamless',
    'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
      'sizes': [40, 50],
      'name': '/delivery_provider_seamless_20180129.png' } } },
'photos': { 'count': 0, 'groups': [] },
'venuePage': { 'id': '59679451' },
'referralId': 'e-0-5002febae4b09da8b06a3d3c-55',
{ 'reasons': { 'count': 0,
  'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason' } ] },
'venue': { 'id': '5a385bc87269fe7b958efc7c',
  'name': 'Poke Burrito',
  'location': { 'address': '37-7 30th Ave',
    'lat': 40.76453965074503,
    'lng': -73.91626291108336,
    'labeledLatLngs': [{ 'label': 'display',
      'lat': 40.76453965074503,
      'lng': -73.91626291108336 } ] },
    'distance': 444,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'New York',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': [ '37-7 30th Ave',
      'New York, NY 11103',
      'United States' ] },
'categories': [{ 'id': '5bae9231bedf3950379f89d4',
  'name': 'Poke Place',
  'pluralName': 'Poke Places',
  'shortName': 'Poke Place',
  'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/defa
ult_',
    'suffix': '.png'},
    'primary': True}],
'delivery': { 'id': '608369',
  'url': 'https://www.seamless.com/menu/poke-burrito-3707-30th-ave-asto
ria/608369?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=
affiliate&utm_campaign=1131&utm_content=608369',
  'provider': { 'name': 'seamless',
    'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
      'sizes': [40, 50],
      'name': '/delivery_provider_seamless_20180129.png' } } },
'photos': { 'count': 0, 'groups': [] },

```

```

    'referralId': 'e-0-5a385bc87269fe7b958efc7c-56'},
    {'reasons': {'count': 0,
      'items': [{'summary': 'This spot is popular',
        'type': 'general',
        'reasonName': 'globalInteractionReason'}]}],
    'venue': {'id': '4b5a9504f964a52071cc28e3',
      'name': 'Albatross Bar',
      'location': {'address': '3619 24th Ave',
        'crossStreet': 'at 37th St.',
        'lat': 40.77004914155301,
        'lng': -73.9122439855205,
        'labeledLatLngs': [{'label': 'display',
          'lat': 40.77004914155301,
          'lng': -73.9122439855205}]},
      'distance': 334,
      'postalCode': '11103',
      'cc': 'US',
      'city': 'Astoria',
      'state': 'NY',
      'country': 'United States',
      'formattedAddress': ['3619 24th Ave (at 37th St.)',
        'Astoria, NY 11103',
        'United States']},
    'categories': [{'id': '4bf58dd8d48988d116941735',
      'name': 'Bar',
      'pluralName': 'Bars',
      'shortName': 'Bar',
      'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/pub_',
        'suffix': '.png'},
      'primary': True}],
    'photos': {'count': 0, 'groups': []},
    'venuePage': {'id': '93699763'}},
    'referralId': 'e-0-4b5a9504f964a52071cc28e3-57'},
    {'reasons': {'count': 0,
      'items': [{'summary': 'This spot is popular',
        'type': 'general',
        'reasonName': 'globalInteractionReason'}]}],
    'venue': {'id': '51e02b2d2fc6b6ed4b767ba5',
      'name': 'CKO Kickboxing',
      'location': {'address': '40-06 Astoria Blvd',
        'crossStreet': 'Steinway St & Astoria BLVD',
        'lat': 40.76866662347918,
        'lng': -73.91072041964338,
        'labeledLatLngs': [{'label': 'display',
          'lat': 40.76866662347918,
          'lng': -73.91072041964338}]},
      'distance': 416,
      'postalCode': '11103',
      'cc': 'US',
      'city': 'Astoria',
      'state': 'NY',
      'country': 'United States',
      'formattedAddress': ['40-06 Astoria Blvd (Steinway St & Astoria BLV
D)',
        'Astoria, NY 11103',
        'United States']},

```

```

'categories': [{ 'id': '4bf58dd8d48988d175941735',
  'name': 'Gym / Fitness Center',
  'pluralName': 'Gyms or Fitness Centers',
  'shortName': 'Gym / Fitness',
  'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/building/
gym_',
    'suffix': '.png'},
    'primary': True}],
  'photos': { 'count': 0, 'groups': []},
  'referralId': 'e-0-51e02b2d2fc6b6ed4b767ba5-58'},
{ 'reasons': { 'count': 0,
  'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'} ]},
  'venue': { 'id': '4fee6aa2e4b05029cc3ffae8',
    'name': 'Mazag Hookah Lounge',
    'location': { 'address': '2574 Steinway St',
      'crossStreet': 'between 25th Ave and 28th Ave',
      'lat': 40.766157342426844,
      'lng': -73.91321179288299,
      'labeledLatLngs': [{ 'label': 'display',
        'lat': 40.766157342426844,
        'lng': -73.91321179288299}],
      'distance': 333,
      'postalCode': '11103',
      'cc': 'US',
      'city': 'Astoria',
      'state': 'NY',
      'country': 'United States',
      'formattedAddress': ['2574 Steinway St (between 25th Ave and 28th Av
e)',
        'Astoria, NY 11103',
        'United States']},
    'categories': [{ 'id': '4bf58dd8d48988d119941735',
      'name': 'Hookah Bar',
      'pluralName': 'Hookah Bars',
      'shortName': 'Hookah Bar',
      'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/hookahbar_',
        'suffix': '.png'},
        'primary': True}],
        'photos': { 'count': 0, 'groups': []},
        'referralId': 'e-0-4fee6aa2e4b05029cc3ffae8-59'},
        { 'reasons': { 'count': 0,
          'items': [{ 'summary': 'This spot is popular',
            'type': 'general',
            'reasonName': 'globalInteractionReason'} ]},
          'venue': { 'id': '4b32bc5df964a520ea1225e3',
            'name': "J'aime Nails",
            'location': { 'address': '2839 31st St',
              'crossStreet': 'btwn Newtown & 30th Ave.',
              'lat': 40.76712194514219,
              'lng': -73.92105354095143,
              'labeledLatLngs': [{ 'label': 'display',
                'lat': 40.76712194514219,
                'lng': -73.92105354095143}],
              'distance': 480,

```

```

    'postalCode': '11102',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['2839 31st St (btwn Newtown & 30th Ave.)',
    'Astoria, NY 11102',
    'United States']],
    'categories': [{ 'id': '4bf58dd8d48988d110951735',
    'name': 'Salon / Barbershop',
    'pluralName': 'Salons / Barbershops',
    'shortName': 'Salon / Barbershop',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/sal
on_barber_',
    'suffix': '.png'},
    'primary': True}],
    'photos': { 'count': 0, 'groups': [] },
    'referralId': 'e-0-4b32bc5df964a520ea1225e3-60'},
    { 'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason' } ] },
    'venue': { 'id': '55b2ac69498e570053bac5de',
    'name': 'Healthy Me',
    'location': { 'address': '30-08 37th St',
    'lat': 40.764499081836114,
    'lng': -73.91675300130188,
    'labeledLatLngs': [{ 'label': 'display',
    'lat': 40.764499081836114,
    'lng': -73.91675300130188 } ] },
    'distance': 455,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['30-08 37th St',
    'Astoria, NY 11103',
    'United States']],
    'categories': [{ 'id': '4bf58dd8d48988d112941735',
    'name': 'Juice Bar',
    'pluralName': 'Juice Bars',
    'shortName': 'Juice Bar',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/juic
ebar_',
    'suffix': '.png'},
    'primary': True}],
    'delivery': { 'id': '334479',
    'url': 'https://www.seamless.com/menu/healthy-me-3008-37th-st-astori
a/334479?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=af
filiate&utm_campaign=1131&utm_content=334479',
    'provider': { 'name': 'seamless',
    'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
    'sizes': [40, 50],
    'name': '/delivery_provider_seamless_20180129.png' } } },
    'photos': { 'count': 0, 'groups': [] },
    'referralId': 'e-0-55b2ac69498e570053bac5de-61'},

```

```

{'reasons': {'count': 0,
  'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
'venuue': {'id': '4bc75a2914d795215b3767e9',
  'name': 'Café Via Espresso',
  'location': {'address': '2409 Steinway St',
    'crossStreet': 'at Astoria Blvd.',
    'lat': 40.7686759,
    'lng': -73.9108511,
    'labeledLatLngs': [{'label': 'display',
      'lat': 40.7686759,
      'lng': -73.9108511}]},
  'distance': 405,
  'postalCode': '11103',
  'cc': 'US',
  'city': 'Astoria',
  'state': 'NY',
  'country': 'United States',
  'formattedAddress': ['2409 Steinway St (at Astoria Blvd.)',
    'Astoria, NY 11103',
    'United States']},
'categories': [{'id': '4bf58dd8d48988d16d941735',
  'name': 'Café',
  'pluralName': 'Cafés',
  'shortName': 'Café',
  'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/cafe
_ ',
    'suffix': '.png'}},
  'primary': True}],
'delivery': {'id': '205826',
  'url': 'https://www.seamless.com/menu/cafe-via-espresso-2409-steinway
-st-astoria/205826?affiliate=1131&utm_source=foursquare-affiliate-network&utm
_medium=affiliate&utm_campaign=1131&utm_content=205826',
  'provider': {'name': 'seamless',
    'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
      'sizes': [40, 50],
      'name': '/delivery_provider_seamless_20180129.png'}}},
  'photos': {'count': 0, 'groups': []}},
'referralId': 'e-0-4bc75a2914d795215b3767e9-62'},
{'reasons': {'count': 0,
  'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
'venuue': {'id': '57cb726f498edb27203fed70',
  'name': 'The Wolfhound',
  'location': {'address': '38-14 30th Ave',
    'crossStreet': '38th St And 30th Ave',
    'lat': 40.764017216784595,
    'lng': -73.91534133412702,
    'labeledLatLngs': [{'label': 'display',
      'lat': 40.764017216784595,
      'lng': -73.91534133412702}]},
  'distance': 500,
  'postalCode': '11103',
  'cc': 'US',
  'city': 'Astoria',

```

```

    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['38-14 30th Ave (38th St And 30th Ave)',
    'Astoria, NY 11103',
    'United States']},
    'categories': [{ 'id': '4bf58dd8d48988d11e941735',
    'name': 'Cocktail Bar',
    'pluralName': 'Cocktail Bars',
    'shortName': 'Cocktail',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/cocktails_',
    'suffix': '.png'},
    'primary': True}],
    'photos': { 'count': 0, 'groups': []}},
    'referralId': 'e-0-57cb726f498edb27203fed70-63'},
    { 'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': { 'id': '4d1518c31356a0939f16ce82',
    'name': 'Muho Liquors',
    'location': { 'address': '28-11 Steinway St',
    'lat': 40.76514823711042,
    'lng': -73.91393938593193,
    'labeledLatLngs': [{ 'label': 'display',
    'lat': 40.76514823711042,
    'lng': -73.91393938593193}],
    'distance': 401,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['28-11 Steinway St',
    'Astoria, NY 11103',
    'United States']},
    'categories': [{ 'id': '4bf58dd8d48988d186941735',
    'name': 'Liquor Store',
    'pluralName': 'Liquor Stores',
    'shortName': 'Liquor Store',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/foo
d_liquor_',
    'suffix': '.png'},
    'primary': True}],
    'photos': { 'count': 0, 'groups': []}},
    'referralId': 'e-0-4d1518c31356a0939f16ce82-64'},
    { 'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': { 'id': '4b22e77ef964a520065024e3',
    'name': 'Egyptian Coffee Shop',
    'location': { 'address': '25-09 Steinway St',
    'lat': 40.7676602494743,
    'lng': -73.91176937941454,
    'labeledLatLngs': [{ 'label': 'display',
    'lat': 40.7676602494743,

```

```

    'lng': -73.91176937941454}],
    'distance': 340,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['25-09 Steinway St',
    'Astoria, NY 11103',
    'United States']],
    'categories': [{ 'id': '4bf58dd8d48988d119941735',
    'name': 'Hookah Bar',
    'pluralName': 'Hookah Bars',
    'shortName': 'Hookah Bar',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/hookahbar_',
    'suffix': '.png'},
    'primary': True}],
    'photos': { 'count': 0, 'groups': []},
    'referralId': 'e-0-4b22e77ef964a520065024e3-65'},
    {'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': { 'id': '4fc98019e4b0dddfbb5eeaa',
    'name': 'Jasmin Lounge',
    'location': { 'address': '2550 Steinway St',
    'lat': 40.7667197570676,
    'lng': -73.91277342040742,
    'labeledLatLngs': [{ 'label': 'display',
    'lat': 40.7667197570676,
    'lng': -73.91277342040742}],
    'distance': 314,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['2550 Steinway St',
    'Astoria, NY 11103',
    'United States']],
    'categories': [{ 'id': '4bf58dd8d48988d119941735',
    'name': 'Hookah Bar',
    'pluralName': 'Hookah Bars',
    'shortName': 'Hookah Bar',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/hookahbar_',
    'suffix': '.png'},
    'primary': True}],
    'photos': { 'count': 0, 'groups': []},
    'referralId': 'e-0-4fc98019e4b0dddfbb5eeaa-66'},
    {'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': { 'id': '4b726a56f964a520467a2de3',
    'name': 'Halal Sandwich Shop',

```



```

'location': {'address': '2561 Steinway St',
'lat': 40.766471415209516,
'lng': -73.91288020325058,
'labeledLatLngs': [{'label': 'display',
'lat': 40.766471415209516,
'lng': -73.91288020325058}]},
'distance': 325,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['2561 Steinway St',
'Astoria, NY 11103',
'United States']],
'categories': [{'id': '4bf58dd8d48988d115941735',
'name': 'Middle Eastern Restaurant',
'pluralName': 'Middle Eastern Restaurants',
'shortName': 'Middle Eastern',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/middle_eastern_',
'suffix': '.png'},
'primary': True}],
'photos': {'count': 0, 'groups': []},
'referralId': 'e-0-4b726a56f964a520467a2de3-67'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]}},
'venue': {'id': '4bb4e7f4eb6dd13aeb7c96e4',
'name': "Kiki's Nail & Spa",
'location': {'address': '3420 30th Ave',
'lat': 40.765424391283126,
'lng': -73.91838281217116,
'labeledLatLngs': [{'label': 'display',
'lat': 40.765424391283126,
'lng': -73.91838281217116}]},
'distance': 413,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['3420 30th Ave',
'Astoria, NY 11103',
'United States']],
'categories': [{'id': '4bf58dd8d48988d1ed941735',
'name': 'Spa',
'pluralName': 'Spas',
'shortName': 'Spa',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/spa_',
'suffix': '.png'},
'primary': True}],
'photos': {'count': 0, 'groups': []},
'referralId': 'e-0-4bb4e7f4eb6dd13aeb7c96e4-68'},
{'reasons': {'count': 0,

```

```

    'items': [{ 'summary': 'This spot is popular',
                  'type': 'general',
                  'reasonName': 'globalInteractionReason' } ] ],
  'venue': { 'id': '5651f61f498ecdb84af6f583',
             'name': 'Kurru Qulture',
             'location': { 'address': '36-05 30th Ave',
                           'crossStreet': '36th Street',
                           'lat': 40.76497824295583,
                           'lng': -73.9171510586292,
                           'labeledLatLngs': [ { 'label': 'display',
                                                    'lat': 40.76497824295583,
                                                    'lng': -73.9171510586292 } ] ],
             'distance': 412,
             'postalCode': '11103',
             'cc': 'US',
             'city': 'Astoria',
             'state': 'NY',
             'country': 'United States',
             'formattedAddress': [ '36-05 30th Ave (36th Street)',
                                   'Astoria, NY 11103',
                                   'United States' ] ],
  'categories': [ { 'id': '4bf58dd8d48988d10f941735',
                    'name': 'Indian Restaurant',
                    'pluralName': 'Indian Restaurants',
                    'shortName': 'Indian',
                    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/indi
an_',
                              'suffix': '.png' },
                    'primary': True } ] ],
  'delivery': { 'id': '326057',
                'url': 'https://www.seamless.com/menu/kurru-qulture-36-05-30th-ave-as
toria/326057?affiliate=1131&utm_source=foursquare-affiliate-network&utm_mediu
m=affiliate&utm_campaign=1131&utm_content=326057',
                'provider': { 'name': 'seamless',
                              'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
                                        'sizes': [40, 50],
                                        'name': '/delivery_provider_seamless_20180129.png' } } },
  'photos': { 'count': 0, 'groups': [ ] },
  'referralId': 'e-0-5651f61f498ecdb84af6f583-69' },
  { 'reasons': { 'count': 0,
                 'items': [ { 'summary': 'This spot is popular',
                               'type': 'general',
                               'reasonName': 'globalInteractionReason' } ] ],
    'venue': { 'id': '5865a05e727ba373f2dfb682',
               'name': 'Greenbay Market',
               'location': { 'address': '31-10 30th ave',
                             'lat': 40.766698337653,
                             'lng': -73.92100850953132,
                             'labeledLatLngs': [ { 'label': 'display',
                                                      'lat': 40.766698337653,
                                                      'lng': -73.92100850953132 } ] ],
               'distance': 494,
               'postalCode': '11102',
               'cc': 'US',
               'neighborhood': 'Astoria',
               'city': 'Queens',
               'state': 'NY',

```

```

    'country': 'United States',
    'formattedAddress': ['31-10 30th ave',
    'Queens, NY 11102',
    'United States']},
    'categories': [{'id': '4bf58dd8d48988d118951735',
    'name': 'Grocery Store',
    'pluralName': 'Grocery Stores',
    'shortName': 'Grocery Store',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/food_grocery_',
    'suffix': '.png'},
    'primary': True}],
    'photos': {'count': 0, 'groups': []},
    'referralId': 'e-0-5865a05e727ba373f2dfb682-70'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': {'id': '4e5141c2e4cdc76dc9ca458c',
    'name': 'Mama Frozen Yogurt',
    'location': {'address': '35-04 30th Ave',
    'lat': 40.76528427692999,
    'lng': -73.9180927962143,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.76528427692999,
    'lng': -73.9180927962143}],
    'distance': 413,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['35-04 30th Ave',
    'Astoria, NY 11103',
    'United States']},
    'categories': [{'id': '512e7cae91d4cbb4e5efe0af',
    'name': 'Frozen Yogurt Shop',
    'pluralName': 'Frozen Yogurt Shops',
    'shortName': 'Yogurt',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/frozen_yogurt_',
    'suffix': '.png'},
    'primary': True}],
    'photos': {'count': 0, 'groups': []},
    'referralId': 'e-0-4e5141c2e4cdc76dc9ca458c-71'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': {'id': '4ce1805878ddf04d5ce6ab98',
    'name': 'Vision Essential',
    'location': {'address': '36-04 30th Ave',
    'crossStreet': '36th St',
    'lat': 40.764904,
    'lng': -73.91751708,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.764904,

```

```

    'lng': -73.91751708}],
    'distance': 430,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['36-04 30th Ave (36th St)',
    'Astoria, NY 11103',
    'United States']],
    'categories': [{ 'id': '4d954afda243a5684865b473',
    'name': 'Optical Shop',
    'pluralName': 'Optical Shops',
    'shortName': 'Optical',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/building/
medical_opticalshop_',
    'suffix': '.png'},
    'primary': True}],
    'photos': { 'count': 0, 'groups': []},
    'referralId': 'e-0-4ce1805878ddf04d5ce6ab98-72'},
    {'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': { 'id': '4f220a03e4b0c41c502b2ec5',
    'name': "Dominie's",
    'location': { 'address': '34-07 30th Ave',
    'crossStreet': 'btwn 34th & 35th St',
    'lat': 40.765688947965565,
    'lng': -73.91870246805206,
    'labeledLatLngs': [{ 'label': 'display',
    'lat': 40.765688947965565,
    'lng': -73.91870246805206}],
    'distance': 405,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['34-07 30th Ave (btwn 34th & 35th St)',
    'Astoria, NY 11103',
    'United States']],
    'categories': [{ 'id': '4bf58dd8d48988d116941735',
    'name': 'Bar',
    'pluralName': 'Bars',
    'shortName': 'Bar',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/pub_',
    'suffix': '.png'},
    'primary': True}],
    'photos': { 'count': 0, 'groups': []},
    'referralId': 'e-0-4f220a03e4b0c41c502b2ec5-73'},
    {'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': { 'id': '587e6bea01f07747d2b94591',

```

```

'name': 'Blend Astoria',
'location': {'address': '37-17 30th Ave',
'lat': 40.76440209510661,
'lng': -73.91575898494503,
'labeledLatLngs': [{'label': 'display',
'lat': 40.76440209510661,
'lng': -73.91575898494503}]},
'distance': 457,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['37-17 30th Ave',
'Astoria, NY 11103',
'United States']},
'categories': [{'id': '4bf58dd8d48988d1be941735',
'name': 'Latin American Restaurant',
'pluralName': 'Latin American Restaurants',
'shortName': 'Latin American',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/lati
namerican_',
'suffix': '.png'},
'primary': True}],
'delivery': {'id': '613503',
'url': 'https://www.seamless.com/menu/blend-astoria-37-17-30th-ave-as
toria/613503?affiliate=1131&utm_source=foursquare-affiliate-network&utm_mediu
m=affiliate&utm_campaign=1131&utm_content=613503',
'provider': {'name': 'seamless',
'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
'sizes': [40, 50],
'name': '/delivery_provider_seamless_20180129.png'}}},
'photos': {'count': 0, 'groups': []},
'referralId': 'e-0-587e6bea01f07747d2b94591-74'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': {'id': '5abe86326c08d132a962f4b7',
'name': 'Queens Comfort',
'location': {'address': '3618 30th Ave',
'crossStreet': 'btwn 36th & 37th St',
'lat': 40.76464777461987,
'lng': -73.91677540472237,
'labeledLatLngs': [{'label': 'display',
'lat': 40.76464777461987,
'lng': -73.91677540472237}]},
'distance': 440,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['3618 30th Ave (btwn 36th & 37th St)',
'Astoria, NY 11103',
'United States']},
'categories': [{'id': '52e81612bcb57f1066b7a00',

```

```

    'name': 'Comfort Food Restaurant',
    'pluralName': 'Comfort Food Restaurants',
    'shortName': 'Comfort Food',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/defa
ult_',
      'suffix': '.png'},
    'primary': True}],
    'photos': {'count': 0, 'groups': []}},
    'referralId': 'e-0-5abe86326c08d132a962f4b7-75'},
    {'reasons': {'count': 0,
      'items': [{'summary': 'This spot is popular',
        'type': 'general',
        'reasonName': 'globalInteractionReason'}]}],
    'venue': {'id': '5541a608498ecffd52f91dfc',
      'name': 'Astoria Pizza',
      'location': {'address': '32-04 30th Ave',
        'crossStreet': '32 St',
        'lat': 40.76648971271311,
        'lng': -73.92042287572502,
        'labeledLatLngs': [{'label': 'display',
          'lat': 40.76648971271311,
          'lng': -73.92042287572502}]},
        'distance': 460,
        'postalCode': '11102',
        'cc': 'US',
        'city': 'Astoria',
        'state': 'NY',
        'country': 'United States',
        'formattedAddress': ['32-04 30th Ave (32 St)',
          'Astoria, NY 11102',
          'United States']},
      'categories': [{'id': '4bf58dd8d48988d1ca941735',
        'name': 'Pizza Place',
        'pluralName': 'Pizza Places',
        'shortName': 'Pizza',
        'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/pizz
a_',
          'suffix': '.png'},
          'primary': True}],
          'photos': {'count': 0, 'groups': []}},
          'referralId': 'e-0-5541a608498ecffd52f91dfc-76'},
          {'reasons': {'count': 0,
            'items': [{'summary': 'This spot is popular',
              'type': 'general',
              'reasonName': 'globalInteractionReason'}]}],
            'venue': {'id': '578837cecd108caad4364993',
              'name': 'King of Falafel and Shawarma',
              'location': {'address': '3301 30th Ave',
                'crossStreet': '33rd street',
                'lat': 40.766055,
                'lng': -73.919668,
                'labeledLatLngs': [{'label': 'display',
                  'lat': 40.766055,
                  'lng': -73.919668}]},
                  'distance': 434,
                  'postalCode': '11103',
                  'cc': 'US',

```

```

'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['3301 30th Ave (33rd street)',
'Astoria, NY 11103',
'United States']],
'categories': [{ 'id': '4bf58dd8d48988d115941735',
'name': 'Middle Eastern Restaurant',
'pluralName': 'Middle Eastern Restaurants',
'shortName': 'Middle Eastern',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/middleeastern_',
'suffix': '.png'},
'primary': True}],
'photos': { 'count': 0, 'groups': []},
'referralId': 'e-0-578837cecd108caad4364993-77'},
{'reasons': { 'count': 0,
'items': [{ 'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': { 'id': '4a99be2ef964a520393020e3',
'name': 'Elias Corner For Fish',
'location': { 'address': '3104 24th Ave.',
'crossStreet': 'at 31st St.',
'lat': 40.77249603316814,
'lng': -73.91581513157055,
'labeledLatLngs': [{ 'label': 'display',
'lat': 40.77249603316814,
'lng': -73.91581513157055}],
'distance': 444,
'postalCode': '11102',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['3104 24th Ave. (at 31st St.)',
'Astoria, NY 11102',
'United States']],
'categories': [{ 'id': '4bf58dd8d48988d1ce941735',
'name': 'Seafood Restaurant',
'pluralName': 'Seafood Restaurants',
'shortName': 'Seafood',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/seafood_',
'suffix': '.png'},
'primary': True}],
'photos': { 'count': 0, 'groups': []},
'referralId': 'e-0-4a99be2ef964a520393020e3-78'},
{'reasons': { 'count': 0,
'items': [{ 'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason'}]},
'venue': { 'id': '4ebf0e380aaf6450ba608920',
'name': 'Via Trenta',
'location': { 'address': '36-19 30th Ave',
'lat': 40.76474329895629,
'lng': -73.91664146607067,

```

```

    'labeledLatLngs': [{ 'label': 'display',
      'lat': 40.76474329895629,
      'lng': -73.91664146607067 }],
    'distance': 427,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': [ '36-19 30th Ave',
      'Astoria, NY 11103',
      'United States' ]},
    'categories': [{ 'id': '4bf58dd8d48988d110941735',
      'name': 'Italian Restaurant',
      'pluralName': 'Italian Restaurants',
      'shortName': 'Italian',
      'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/ital
ian_',
        'suffix': '.png' },
      'primary': True }],
    'photos': { 'count': 0, 'groups': [] },
    'venuePage': { 'id': '35114713' },
    'referralId': 'e-0-4ebf0e380aaf6450ba608920-79' },
    { 'reasons': { 'count': 0,
      'items': [ { 'summary': 'This spot is popular',
        'type': 'general',
        'reasonName': 'globalInteractionReason' } ] },
    'venue': { 'id': '4276bf00f964a5208e211fe3',
      'name': 'Mombarr',
      'location': { 'address': '25-22 Steinway St',
        'crossStreet': 'btwn 25th & 28th Ave.',
        'lat': 40.76741332013149,
        'lng': -73.91218107519089,
        'labeledLatLngs': [ { 'label': 'display',
          'lat': 40.76741332013149,
          'lng': -73.91218107519089 } ],
        'distance': 317,
        'postalCode': '11103',
        'cc': 'US',
        'city': 'Astoria',
        'state': 'NY',
        'country': 'United States',
        'formattedAddress': [ '25-22 Steinway St (btwn 25th & 28th Ave.)',
          'Astoria, NY 11103',
          'United States' ] },
      'categories': [ { 'id': '4bf58dd8d48988d115941735',
        'name': 'Middle Eastern Restaurant',
        'pluralName': 'Middle Eastern Restaurants',
        'shortName': 'Middle Eastern',
        'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/midd
leeastern_',
          'suffix': '.png' },
        'primary': True } ],
      'photos': { 'count': 0, 'groups': [] },
      'referralId': 'e-0-4276bf00f964a5208e211fe3-80' },
      { 'reasons': { 'count': 0,
        'items': [ { 'summary': 'This spot is popular',

```



```

    'type': 'general',
    'reasonName': 'globalInteractionReason']]],
'venu': {'id': '4a281693f964a520f2941fe3',
'name': "Dave and Tony's Salumeria",
'location': {'address': '3518 30th Ave',
'lat': 40.76585132304675,
'lng': -73.91830855110186,
'labeledLatLngs': [{'label': 'display',
'lat': 40.76585132304675,
'lng': -73.91830855110186}]},
'distance': 370,
'postalCode': '11103',
'cc': 'US',
'city': 'New York',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['3518 30th Ave',
'New York, NY 11103',
'United States']},
'categories': [{'id': '4bf58dd8d48988d146941735',
'name': 'Deli / Bodega',
'pluralName': 'Delis / Bodegas',
'shortName': 'Deli / Bodega',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/deli
_ ',
'suffix': '.png'},
'primary': True}],
'photos': {'count': 0, 'groups': []}},
'referralId': 'e-0-4a281693f964a520f2941fe3-81'},
{'reasons': {'count': 0,
'items': [{'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason']]],
'venu': {'id': '4afc9262f964a520002422e3',
'name': "Yaya's Bakery",
'location': {'address': '2846 31st St',
'crossStreet': '30th Ave',
'lat': 40.76740126221978,
'lng': -73.92104404665905,
'labeledLatLngs': [{'label': 'display',
'lat': 40.76740126221978,
'lng': -73.92104404665905}]},
'distance': 470,
'postalCode': '11102',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['2846 31st St (30th Ave)',
'Astoria, NY 11102',
'United States']},
'categories': [{'id': '4bf58dd8d48988d16a941735',
'name': 'Bakery',
'pluralName': 'Bakeries',
'shortName': 'Bakery',
'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/bake
ry_ ',

```

```

    'suffix': '.png'},
    'primary': True]],
    'photos': {'count': 0, 'groups': []}},
    'referralId': 'e-0-4afc9262f964a520002422e3-82'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]}],
    'venue': {'id': '4e932e7fb8032b150b0cd628',
    'name': 'Burger Club',
    'location': {'address': '32-02 30th Ave',
    'lat': 40.76648708944814,
    'lng': -73.9205783587744,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.76648708944814,
    'lng': -73.9205783587744}]},
    'distance': 472,
    'postalCode': '11102',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['32-02 30th Ave',
    'Astoria, NY 11102',
    'United States']},
    'categories': [{'id': '4bf58dd8d48988d16c941735',
    'name': 'Burger Joint',
    'pluralName': 'Burger Joints',
    'shortName': 'Burgers',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/burg
er_',
    'suffix': '.png'},
    'primary': True]],
    'delivery': {'id': '270301',
    'url': 'https://www.seamless.com/menu/burger-club-32-02-30th-ave-asto
ria/270301?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=
affiliate&utm_campaign=1131&utm_content=270301',
    'provider': {'name': 'seamless',
    'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
    'sizes': [40, 50],
    'name': '/delivery_provider_seamless_20180129.png'}}},
    'photos': {'count': 0, 'groups': []},
    'venuePage': {'id': '106750199'}},
    'referralId': 'e-0-4e932e7fb8032b150b0cd628-83'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]}],
    'venue': {'id': '5b5e2bbe22d490002cec2854',
    'name': 'Higher Grounds Astoria',
    'location': {'address': '25-11 Astoria Blvd',
    'lat': 40.77062934379985,
    'lng': -73.92050027847289,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.77062934379985,
    'lng': -73.92050027847289}]},
    'distance': 471,

```

```

    'postalCode': '11102',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['25-11 Astoria Blvd',
    'Astoria, NY 11102',
    'United States']],
    'categories': [{ 'id': '4bf58dd8d48988d1e0931735',
    'name': 'Coffee Shop',
    'pluralName': 'Coffee Shops',
    'shortName': 'Coffee Shop',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/coff
eeshop_',
    'suffix': '.png'},
    'primary': True}],
    'delivery': { 'id': '1244125',
    'url': 'https://www.seamless.com/menu/higher-grounds-astoria-25-11-as
toria-blvd-new-york/1244125?affiliate=1131&utm_source=foursquare-affiliate-ne
twork&utm_medium=affiliate&utm_campaign=1131&utm_content=1244125',
    'provider': { 'name': 'seamless',
    'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
    'sizes': [40, 50],
    'name': '/delivery_provider_seamless_20180129.png' } }},
    'photos': { 'count': 0, 'groups': [] },
    'referralId': 'e-0-5b5e2bbe22d490002cec2854-84'},
    {'reasons': { 'count': 0,
    'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason' } ] },
    'venue': { 'id': '4bfa3ce75efe2d7f18576d34',
    'name': 'Kabab Café',
    'location': { 'address': '25-12 Steinway St',
    'crossStreet': 'btwn 25th & 28th Ave.',
    'lat': 40.76776070750681,
    'lng': -73.91189147481663,
    'labeledLatLngs': [{ 'label': 'display',
    'lat': 40.76776070750681,
    'lng': -73.91189147481663 } ] },
    'distance': 327,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['25-12 Steinway St (btwn 25th & 28th Ave.)',
    'Astoria, NY 11103',
    'United States']],
    'categories': [{ 'id': '4bf58dd8d48988d115941735',
    'name': 'Middle Eastern Restaurant',
    'pluralName': 'Middle Eastern Restaurants',
    'shortName': 'Middle Eastern',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/midd
leeastern_',
    'suffix': '.png'},
    'primary': True}],
    'photos': { 'count': 0, 'groups': [] },

```

```

    'venuePage': {'id': '107256033'}},
    'referralId': 'e-0-4bfa3ce75efe2d7f18576d34-85'},
    {'reasons': {'count': 0,
        'items': [{'summary': 'This spot is popular',
            'type': 'general',
            'reasonName': 'globalInteractionReason'}]}},
    'venue': {'id': '52e70541498e25eacfde6b47',
        'name': 'Pink Nori',
        'location': {'address': '36-06 30th Ave',
            'crossStreet': '36th st',
            'lat': 40.76493207916268,
            'lng': -73.91722069971638,
            'labeledLatLngs': [{'label': 'display',
                'lat': 40.76493207916268,
                'lng': -73.91722069971638}]},
        'distance': 419,
        'postalCode': '11103',
        'cc': 'US',
        'city': 'Astoria',
        'state': 'NY',
        'country': 'United States',
        'formattedAddress': ['36-06 30th Ave (36th st)',
            'Astoria, NY 11103',
            'United States']},
        'categories': [{'id': '4bf58dd8d48988d111941735',
            'name': 'Japanese Restaurant',
            'pluralName': 'Japanese Restaurants',
            'shortName': 'Japanese',
            'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/japa
nese_',
                'suffix': '.png'},
            'primary': True}],
        'delivery': {'id': '288747',
            'url': 'https://www.seamless.com/menu/pink-nori-3606-30th-ave-astori
a/288747?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=af
filiate&utm_campaign=1131&utm_content=288747',
            'provider': {'name': 'seamless',
                'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
                    'sizes': [40, 50],
                    'name': '/delivery_provider_seamless_20180129.png'}}},
            'photos': {'count': 0, 'groups': []},
            'venuePage': {'id': '83366997'}},
        'referralId': 'e-0-52e70541498e25eacfde6b47-86'},
        {'reasons': {'count': 0,
            'items': [{'summary': 'This spot is popular',
                'type': 'general',
                'reasonName': 'globalInteractionReason'}]}},
        'venue': {'id': '4a415001f964a52014a51fe3',
            'name': 'New York Sports Clubs',
            'location': {'address': '38-11 30th Ave',
                'crossStreet': 'at 38th St.',
                'lat': 40.76426352155887,
                'lng': -73.91563699810902,
                'labeledLatLngs': [{'label': 'display',
                    'lat': 40.76426352155887,
                    'lng': -73.91563699810902}]},
                'distance': 472,

```

```

'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['38-11 30th Ave (at 38th St.)',
'Astoria, NY 11103',
'United States']],
'categories': [{ 'id': '4bf58dd8d48988d175941735',
'name': 'Gym / Fitness Center',
'pluralName': 'Gyms or Fitness Centers',
'shortName': 'Gym / Fitness',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/building/
gym_',
'suffix': '.png'},
'primary': True}],
'photos': { 'count': 0, 'groups': [] },
'referralId': 'e-0-4a415001f964a52014a51fe3-87'},
{'reasons': { 'count': 0,
'items': [{ 'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason' } ] },
'venue': { 'id': '4ed859590aaf49e02718d9d6',
'name': 'Layali Dubai',
'location': { 'address': '2417 Steinway St',
'lat': 40.76866645857328,
'lng': -73.9109328752284,
'labeledLatLngs': [{ 'label': 'display',
'lat': 40.76866645857328,
'lng': -73.9109328752284 } ] },
'distance': 398,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['2417 Steinway St',
'Astoria, NY 11103',
'United States']],
'categories': [{ 'id': '4bf58dd8d48988d115941735',
'name': 'Middle Eastern Restaurant',
'pluralName': 'Middle Eastern Restaurants',
'shortName': 'Middle Eastern',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/midd
leeastern_',
'suffix': '.png'},
'primary': True}],
'delivery': { 'id': '966639',
'url': 'https://www.seamless.com/menu/layali-dubai-restaurant-2417-st
einway-st-astoria/966639?affiliate=1131&utm_source=foursquare-affiliate-netwo
rk&utm_medium=affiliate&utm_campaign=1131&utm_content=966639',
'provider': { 'name': 'seamless',
'icon': { 'prefix': 'https://fastly.4sqi.net/img/general/cap/',
'sizes': [40, 50],
'name': '/delivery_provider_seamless_20180129.png' } } },
'photos': { 'count': 0, 'groups': [] },
'referralId': 'e-0-4ed859590aaf49e02718d9d6-88'},

```

```

{'reasons': {'count': 0,
  'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
'venuue': {'id': '4b770872f964a5206d762ee3',
  'name': 'Elliniki Agora',
  'location': {'address': '32-12 30th Ave',
    'crossStreet': '33rd St',
    'lat': 40.766339152101246,
    'lng': -73.92014456849674,
    'labeledLatLngs': [{'label': 'display',
      'lat': 40.766339152101246,
      'lng': -73.92014456849674}]},
  'distance': 449,
  'postalCode': '11102',
  'cc': 'US',
  'city': 'Astoria',
  'state': 'NY',
  'country': 'United States',
  'formattedAddress': ['32-12 30th Ave (33rd St)',
    'Astoria, NY 11102',
    'United States']},
'categories': [{'id': '4bf58dd8d48988d1f9941735',
  'name': 'Food & Drink Shop',
  'pluralName': 'Food & Drink Shops',
  'shortName': 'Food & Drink',
  'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/foodanddrink_',
    'suffix': '.png'},
  'primary': True}],
'photos': {'count': 0, 'groups': []}},
'referralId': 'e-0-4b770872f964a5206d762ee3-89'},
{'reasons': {'count': 0,
  'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
'venuue': {'id': '4c15a182583c9c74bccf3fa4',
  'name': 'Café To Go Creperie',
  'location': {'address': '3119 30th Ave',
    'lat': 40.76683085520095,
    'lng': -73.92044142362329,
    'labeledLatLngs': [{'label': 'display',
      'lat': 40.76683085520095,
      'lng': -73.92044142362329}]},
  'distance': 444,
  'postalCode': '11102',
  'cc': 'US',
  'city': 'Astoria',
  'state': 'NY',
  'country': 'United States',
  'formattedAddress': ['3119 30th Ave',
    'Astoria, NY 11102',
    'United States']},
'categories': [{'id': '4bf58dd8d48988d16d941735',
  'name': 'Café',
  'pluralName': 'Cafés',
  'shortName': 'Café',

```

```

    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/cafe
_ ',
    'suffix': '.png'},
    'primary': True}],
    'delivery': {'id': '300470',
    'url': 'https://www.seamless.com/menu/cafe-to-go-31-19-30th-ave-astor
ia/300470?affiliate=1131&utm_source=foursquare-affiliate-network&utm_medium=a
ffiliate&utm_campaign=1131&utm_content=300470',
    'provider': {'name': 'seamless',
    'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
    'sizes': [40, 50],
    'name': '/delivery_provider_seamless_20180129.png'}}},
    'photos': {'count': 0, 'groups': []},
    'venuePage': {'id': '86476283'}},
    'referralId': 'e-0-4c15a182583c9c74bccf3fa4-90'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': {'id': '52883f27498e9c67784999c3',
    'name': 'Midnight Lounge',
    'location': {'address': '25-39 Steinway St',
    'lat': 40.76693047730325,
    'lng': -73.91246212832796,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.76693047730325,
    'lng': -73.91246212832796}]},
    'distance': 321,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['25-39 Steinway St',
    'Astoria, NY 11103',
    'United States']},
    'categories': [{'id': '4bf58dd8d48988d119941735',
    'name': 'Hookah Bar',
    'pluralName': 'Hookah Bars',
    'shortName': 'Hookah Bar',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/nightlif
e/hookahbar_',
    'suffix': '.png'},
    'primary': True}],
    'photos': {'count': 0, 'groups': []},
    'venuePage': {'id': '92156948'}},
    'referralId': 'e-0-52883f27498e9c67784999c3-91'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': {'id': '4bbc15b3ed7776b0b5563f51',
    'name': 'Sampan',
    'location': {'address': '2848 Steinway St',
    'lat': 40.76431864769857,
    'lng': -73.91466600127636,
    'labeledLatLngs': [{'label': 'display',

```

```

    'lat': 40.76431864769857,
    'lng': -73.91466600127636}],
    'distance': 473,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Long Island City',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['2848 Steinway St',
    'Long Island City, NY 11103',
    'United States']],
    'categories': [{'id': '4bf58dd8d48988d145941735',
    'name': 'Chinese Restaurant',
    'pluralName': 'Chinese Restaurants',
    'shortName': 'Chinese',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/asia
n_',
    'suffix': '.png'},
    'primary': True}],
    'delivery': {'id': '338402',
    'url': 'https://www.seamless.com/menu/sampan-chinese-restaurant-2848-
steinway-st-astoria/338402?affiliate=1131&utm_source=foursquare-affiliate-net
work&utm_medium=affiliate&utm_campaign=1131&utm_content=338402',
    'provider': {'name': 'seamless',
    'icon': {'prefix': 'https://fastly.4sqi.net/img/general/cap/',
    'sizes': [40, 50],
    'name': '/delivery_provider_seamless_20180129.png'}}},
    'photos': {'count': 0, 'groups': []}},
    'referralId': 'e-0-4bbc15b3ed7776b0b5563f51-92'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
    'venue': {'id': '5b9586483d4791002c832b13',
    'name': 'Gossip Coffee And Cocktails',
    'location': {'address': '37-04 30th Ave',
    'crossStreet': 'btwn 37th & 38th St',
    'lat': 40.764521949611066,
    'lng': -73.91646215978797,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.764521949611066,
    'lng': -73.91646215978797}]},
    'distance': 448,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Queens',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['37-04 30th Ave (btwn 37th & 38th St)',
    'Queens, NY 11103',
    'United States']],
    'categories': [{'id': '4bf58dd8d48988d1e0931735',
    'name': 'Coffee Shop',
    'pluralName': 'Coffee Shops',
    'shortName': 'Coffee Shop',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/coff
eeshop_',

```



```

    'suffix': '.png'},
    'primary': True]],
    'photos': {'count': 0, 'groups': []}},
    'referralId': 'e-0-5b9586483d4791002c832b13-93'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]}],
    'venue': {'id': '4b6c92bdf964a52011442ce3',
    'name': 'Smart Choice Convenience Store',
    'location': {'address': '34-12 30th Ave',
    'lat': 40.765585377317976,
    'lng': -73.91862193108781,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.765585377317976,
    'lng': -73.91862193108781}]},
    'distance': 410,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['34-12 30th Ave',
    'Astoria, NY 11103',
    'United States']},
    'categories': [{'id': '4bf58dd8d48988d146941735',
    'name': 'Deli / Bodega',
    'pluralName': 'Delis / Bodegas',
    'shortName': 'Deli / Bodega',
    'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/deli

```

_,

```

    'suffix': '.png'},
    'primary': True]],
    'photos': {'count': 0, 'groups': []}},
    'referralId': 'e-0-4b6c92bdf964a52011442ce3-94'},
    {'reasons': {'count': 0,
    'items': [{'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]}],
    'venue': {'id': '4c7b10fe97028cfa3345e0fe',
    'name': 'Jannah Charcoal & Grill',
    'location': {'address': '30th Avenue',
    'crossStreet': '38th Street',
    'lat': 40.7640867218297,
    'lng': -73.91558201721965,
    'labeledLatLngs': [{'label': 'display',
    'lat': 40.7640867218297,
    'lng': -73.91558201721965}]},
    'distance': 492,
    'postalCode': '11102',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['30th Avenue (38th Street)',
    'Astoria, NY 11102',
    'United States']},

```

```

'categories': [{ 'id': '4bf58dd8d48988d1cb941735',
  'name': 'Food Truck',
  'pluralName': 'Food Trucks',
  'shortName': 'Food Truck',
  'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/streetfood_',
    'suffix': '.png'},
  'primary': True}],
'photos': { 'count': 0, 'groups': []},
'referralId': 'e-0-4c7b10fe97028cfa3345e0fe-95'},
{'reasons': { 'count': 0,
  'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
'venue': { 'id': '4ba94144f964a5208b183ae3',
  'name': 'Absolute Wine & Spirits',
  'location': { 'address': '3413 30th Ave',
    'crossStreet': 'btwn 34th & 35th St.',
    'lat': 40.76557301229827,
    'lng': -73.91846405194195,
    'labeledLatLngs': [{ 'label': 'display',
      'lat': 40.76557301229827,
      'lng': -73.91846405194195}],
    'distance': 403,
    'postalCode': '11103',
    'cc': 'US',
    'city': 'Astoria',
    'state': 'NY',
    'country': 'United States',
    'formattedAddress': ['3413 30th Ave (btwn 34th & 35th St.)',
      'Astoria, NY 11103',
      'United States']},
  'categories': [{ 'id': '4bf58dd8d48988d119951735',
    'name': 'Wine Shop',
    'pluralName': 'Wine Shops',
    'shortName': 'Wine Shop',
    'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/food_wineshop_',
      'suffix': '.png'},
    'primary': True}],
  'photos': { 'count': 0, 'groups': []},
  'referralId': 'e-0-4ba94144f964a5208b183ae3-96'},
{'reasons': { 'count': 0,
  'items': [{ 'summary': 'This spot is popular',
    'type': 'general',
    'reasonName': 'globalInteractionReason'}]},
'venue': { 'id': '4b6659a5f964a520d31e2be3',
  'name': 'Matsu Sushi',
  'location': { 'address': '34-11 30th Ave',
    'lat': 40.76558710454389,
    'lng': -73.91857219992431,
    'labeledLatLngs': [{ 'label': 'display',
      'lat': 40.76558710454389,
      'lng': -73.91857219992431}],
    'distance': 407,
    'postalCode': '11103',
    'cc': 'US',

```

```

'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['34-11 30th Ave',
'Astoria, NY 11103',
'United States']],
'categories': [{ 'id': '4bf58dd8d48988d1d2941735',
'name': 'Sushi Restaurant',
'pluralName': 'Sushi Restaurants',
'shortName': 'Sushi',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/sush
i_',
'suffix': '.png'},
'primary': True}],
'photos': { 'count': 0, 'groups': []},
'venuePage': { 'id': '122831614' }},
'referralId': 'e-0-4b6659a5f964a520d31e2be3-97'},
{'reasons': { 'count': 0,
'items': [{ 'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason' } ]},
'venue': { 'id': '4dee9d327d8be635ea67f698',
'name': 'Dawa Threading Salon',
'location': { 'address': '31-08 30th Ave Apt 2',
'lat': 40.76673223813516,
'lng': -73.92106950875352,
'labeledLatLngs': [{ 'label': 'display',
'lat': 40.76673223813516,
'lng': -73.92106950875352 } ]},
'distance': 497,
'postalCode': '11102',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['31-08 30th Ave Apt 2',
'Astoria, NY 11102',
'United States']],
'categories': [{ 'id': '4bf58dd8d48988d110951735',
'name': 'Salon / Barbershop',
'pluralName': 'Salons / Barbershops',
'shortName': 'Salon / Barbershop',
'icon': { 'prefix': 'https://ss3.4sqi.net/img/categories_v2/shops/sal
on_barber_',
'suffix': '.png'},
'primary': True}],
'photos': { 'count': 0, 'groups': []},
'referralId': 'e-0-4dee9d327d8be635ea67f698-98'},
{'reasons': { 'count': 0,
'items': [{ 'summary': 'This spot is popular',
'type': 'general',
'reasonName': 'globalInteractionReason' } ]},
'venue': { 'id': '50e8c2c7e4b0688e455b3e52',
'name': 'Aden Restaurant',
'location': { 'address': '24-42 Steinway St',
'lat': 40.768233,
'lng': -73.911779,

```

```

'labeledLatLngs': [{'label': 'display',
  'lat': 40.768233,
  'lng': -73.911779}],
'distance': 328,
'postalCode': '11103',
'cc': 'US',
'city': 'Astoria',
'state': 'NY',
'country': 'United States',
'formattedAddress': ['24-42 Steinway St',
  'Astoria, NY 11103',
  'United States']],
'categories': [{'id': '4bf58dd8d48988d115941735',
  'name': 'Middle Eastern Restaurant',
  'pluralName': 'Middle Eastern Restaurants',
  'shortName': 'Middle Eastern',
  'icon': {'prefix': 'https://ss3.4sqi.net/img/categories_v2/food/middle_eastern_',
    'suffix': '.png'},
  'primary': True}],
'photos': {'count': 0, 'groups': []}},
'referralId': 'e-0-50e8c2c7e4b0688e455b3e52-99'}}]]]]}

```

In [41]:

```

# function that extracts the category of the venue
def get_category_type(row):
    try:
        categories_list = row['categories']
    except:
        categories_list = row['venue.categories']

    if len(categories_list) == 0:
        return None
    else:
        return categories_list[0]['name']

```

In [42]:

```

venues = results['response']['groups'][0]['items']

nearby_venues = json_normalize(venues) # flatten JSON

# filter columns
filtered_columns = ['venue.name', 'venue.categories', 'venue.location.lat', 'venue.location.lng']
nearby_venues = nearby_venues.loc[:, filtered_columns]

# filter the category for each row
nearby_venues['venue.categories'] = nearby_venues.apply(get_category_type, axis=1)

# clean columns
nearby_venues.columns = [col.split(".")[1] for col in nearby_venues.columns]

nearby_venues.head()

```

Out[42]:

	name	categories	lat	lng
0	Favela Grill	Brazilian Restaurant	40.767348	-73.917897
1	CrossFit Queens	Gym	40.769404	-73.918977
2	Titan Foods Inc.	Gourmet Shop	40.769198	-73.919253
3	Orange Blossom	Gourmet Shop	40.769856	-73.917012
4	Simply Fit Astoria	Gym	40.769114	-73.912403

In [43]:

```
print('{} venues were returned by Foursquare.'.format(nearby_venues.shape[0]))
```

100 venues were returned by Foursquare.

5. Explore Neighborhoods in Queens

In [44]:

```

def getNearbyVenues(names, latitudes, longitudes, radius=500):

    venues_list=[]
    for name, lat, lng in zip(names, latitudes, longitudes):
        print(name)

        # create the API request URL
        url = 'https://api.foursquare.com/v2/venues/explore?&client_id={}&client_secret={}&v={}&ll={},{}&radius={}&limit={}'.format(
            CLIENT_ID,
            CLIENT_SECRET,
            VERSION,
            lat,
            lng,
            radius,
            LIMIT)

        # make the GET request
        results = requests.get(url).json()["response"]["groups"][0]["items"]

        # return only relevant information for each nearby venue
        venues_list.append([(
            name,
            lat,
            lng,
            v['venue']['name'],
            v['venue']['location']['lat'],
            v['venue']['location']['lng'],
            v['venue']['categories'][0]['name']) for v in results])

    nearby_venues = pd.DataFrame([item for venue_list in venues_list for item in venue_list])
    nearby_venues.columns = ['Neighborhood', 'Neighborhood Latitude',
                             'Neighborhood Longitude',
                             'Venue',
                             'Venue Latitude',
                             'Venue Longitude',
                             'Venue Category']

    return(nearby_venues)

```

In [45]:

```
Queens_venues = getNearbyVenues(names=Queens_data['Neighborhood'],  
                                latitudes=Queens_data['Latitude'],  
                                longitudes=Queens_data['Longitude']  
                                )
```

Astoria
Woodside
Jackson Heights
Elmhurst
Howard Beach
Corona
Forest Hills
Kew Gardens
Richmond Hill
Flushing
Long Island City
Sunnyside
East Elmhurst
Maspeth
Ridgewood
Glendale
Rego Park
Woodhaven
Ozone Park
South Ozone Park
College Point
Whitestone
Bayside
Auburndale
Little Neck
Douglaston
Glen Oaks
Bellerose
Kew Gardens Hills
Fresh Meadows
Briarwood
Jamaica Center
Oakland Gardens
Queens Village
Hollis
South Jamaica
St. Albans
Rochdale
Springfield Gardens
Cambria Heights
Rosedale
Far Rockaway
Broad Channel
Breezy Point
Steinway
Beechhurst
Bay Terrace
Edgemere
Arverne
Rockaway Beach
Neponsit
Murray Hill
Floral Park
Holliswood
Jamaica Estates
Queensboro Hill
Hillcrest

Ravenswood
 Lindenwood
 Laurelton
 Lefrak City
 Belle Harbor
 Rockaway Park
 Somerville
 Brookville
 Bellaire
 North Corona
 Forest Hills Gardens
 Jamaica Hills
 Utopia
 Pomonok
 Astoria Heights
 Hunters Point
 Sunnyside Gardens
 Blissville
 Roxbury
 Middle Village
 Malba
 Hammels
 Bayswater
 Queensbridge

In [46]:

```
print(Queens_venues.shape)
Queens_venues.head()
```

(2180, 7)

Out[46]:

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Astoria	40.768509	-73.915654	Favela Grill	40.767348	-73.917897	Brazilian Restaurant
1	Astoria	40.768509	-73.915654	CrossFit Queens	40.769404	-73.918977	Gym
2	Astoria	40.768509	-73.915654	Titan Foods Inc.	40.769198	-73.919253	Gourmet Shop
3	Astoria	40.768509	-73.915654	Orange Blossom	40.769856	-73.917012	Gourmet Shop
4	Astoria	40.768509	-73.915654	Simply Fit Astoria	40.769114	-73.912403	Gym

In [47]:

```
Queens_venues.groupby('Neighborhood').count()
```

Out[47]:

	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
Neighborhood						
Arverne	18	18	18	18	18	18
Astoria	100	100	100	100	100	100
Astoria Heights	13	13	13	13	13	13
Auburndale	18	18	18	18	18	18
Bay Terrace	40	40	40	40	40	40
Bayside	70	70	70	70	70	70
Bayswater	2	2	2	2	2	2
Beechhurst	16	16	16	16	16	16
Bellaire	12	12	12	12	12	12
Belle Harbor	18	18	18	18	18	18
Bellerose	23	23	23	23	23	23
Blissville	22	22	22	22	22	22
Breezy Point	4	4	4	4	4	4
Briarwood	14	14	14	14	14	14
Broad Channel	6	6	6	6	6	6
Brookville	1	1	1	1	1	1
Cambria Heights	17	17	17	17	17	17
College Point	41	41	41	41	41	41
Corona	22	22	22	22	22	22
Douglaston	22	22	22	22	22	22
East Elmhurst	11	11	11	11	11	11
Edgemere	14	14	14	14	14	14
Elmhurst	42	42	42	42	42	42
Far Rockaway	31	31	31	31	31	31
Floral Park	4	4	4	4	4	4
Flushing	58	58	58	58	58	58
Forest Hills	39	39	39	39	39	39
Forest Hills Gardens	21	21	21	21	21	21
Fresh Meadows	15	15	15	15	15	15
Glen Oaks	21	21	21	21	21	21
Glendale	4	4	4	4	4	4

	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
Neighborhood						
Hammels	19	19	19	19	19	19
Hillcrest	21	21	21	21	21	21
Hollis	20	20	20	20	20	20
Holliswood	4	4	4	4	4	4
Howard Beach	52	52	52	52	52	52
Hunters Point	72	72	72	72	72	72
Jackson Heights	80	80	80	80	80	80
Jamaica Center	46	46	46	46	46	46
Jamaica Estates	4	4	4	4	4	4
Jamaica Hills	25	25	25	25	25	25
Kew Gardens	48	48	48	48	48	48
Kew Gardens Hills	20	20	20	20	20	20
Laurelton	6	6	6	6	6	6
Lefrak City	28	28	28	28	28	28
Lindenwood	12	12	12	12	12	12
Little Neck	46	46	46	46	46	46
Long Island City	78	78	78	78	78	78
Malba	3	3	3	3	3	3
Maspeth	31	31	31	31	31	31
Middle Village	18	18	18	18	18	18
Murray Hill	46	46	46	46	46	46
Neponsit	5	5	5	5	5	5
North Corona	25	25	25	25	25	25
Oakland Gardens	24	24	24	24	24	24
Ozone Park	33	33	33	33	33	33
Pomonok	11	11	11	11	11	11
Queens Village	17	17	17	17	17	17
Queensboro Hill	25	25	25	25	25	25
Queensbridge	15	15	15	15	15	15
Ravenswood	26	26	26	26	26	26
Rego Park	46	46	46	46	46	46

	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
Neighborhood						
Richmond Hill	26	26	26	26	26	26
Ridgewood	36	36	36	36	36	36
Rochdale	23	23	23	23	23	23
Rockaway Beach	58	58	58	58	58	58
Rockaway Park	27	27	27	27	27	27
Rosedale	15	15	15	15	15	15
Roxbury	10	10	10	10	10	10
Somerville	1	1	1	1	1	1
South Jamaica	7	7	7	7	7	7
South Ozone Park	13	13	13	13	13	13
Springfield Gardens	16	16	16	16	16	16
St. Albans	16	16	16	16	16	16
Steinway	25	25	25	25	25	25
Sunnyside	40	40	40	40	40	40
Sunnyside Gardens	100	100	100	100	100	100
Utopia	17	17	17	17	17	17
Whitestone	6	6	6	6	6	6
Woodhaven	24	24	24	24	24	24
Woodside	75	75	75	75	75	75

In [48]:

```
print('There are {} uniques categories.'.format(len(Queens_venues['Venue Category'].unique())))
```

There are 273 uniques categories.

6. Analyze Each Neighborhood

In [49]:

```

# one hot encoding
Queens_onehot = pd.get_dummies(Queens_venues[['Venue Category']], prefix="", prefix_sep=""
)

# add neighborhood column back to dataframe
Queens_onehot['Neighborhood'] = Queens_venues['Neighborhood']

# move neighborhood column to the first column
fixed_columns = [Queens_onehot.columns[-1]] + list(Queens_onehot.columns[:-1])
Queens_onehot = Queens_onehot[fixed_columns]

Queens_onehot.head()

```

Out[49]:

	Yoga Studio	Accessories Store	Afghan Restaurant	Airport Terminal	American Restaurant	Arepa Restaurant	Argentinian Restaurant	Art Gallery	Museum
0	0	0	0	0	0	0	0	0	
1	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	

In [50]:

```
Queens_onehot.shape
```

Out[50]:

(2180, 273)

In [51]:

```
Queens_grouped = Queens_onehot.groupby('Neighborhood').mean().reset_index()  
Queens_grouped
```

Out[51]:

	Neighborhood	Yoga Studio	Accessories Store	Afghan Restaurant	Airport Terminal	American Restaurant	Arepa Restaurant	Argentin Restau
0	Arverne	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
1	Astoria	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
2	Astoria Heights	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
3	Auburndale	0.000000	0.000000	0.000000	0.000000	0.055556	0.000000	0.00
4	Bay Terrace	0.000000	0.025000	0.000000	0.000000	0.050000	0.000000	0.00
5	Bayside	0.014286	0.000000	0.000000	0.000000	0.042857	0.000000	0.00
6	Bayswater	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
7	Beechhurst	0.062500	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
8	Bellaire	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
9	Belle Harbor	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
10	Bellerose	0.000000	0.000000	0.000000	0.000000	0.043478	0.000000	0.00
11	Blissville	0.000000	0.000000	0.000000	0.045455	0.000000	0.000000	0.00
12	Breezy Point	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
13	Briarwood	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
14	Broad Channel	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
15	Brookville	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
16	Cambria Heights	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
17	College Point	0.000000	0.000000	0.000000	0.000000	0.024390	0.000000	0.00
18	Corona	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
19	Douglaston	0.045455	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
20	East Elmhurst	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
21	Edgemere	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
22	Elmhurst	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.02
23	Far Rockaway	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
24	Floral Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
25	Flushing	0.017241	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
26	Forest Hills	0.051282	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
27	Forest Hills Gardens	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
28	Fresh Meadows	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
29	Glen Oaks	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
30	Glendale	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00

	Neighborhood	Yoga Studio	Accessories Store	Afghan Restaurant	Airport Terminal	American Restaurant	Arepa Restaurant	Argentin Restau
31	Hammels	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
32	Hillcrest	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
33	Hollis	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
34	Holliswood	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
35	Howard Beach	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
36	Hunters Point	0.013889	0.000000	0.000000	0.000000	0.027778	0.000000	0.00
37	Jackson Heights	0.000000	0.000000	0.000000	0.000000	0.012500	0.000000	0.01
38	Jamaica Center	0.000000	0.000000	0.000000	0.000000	0.043478	0.000000	0.00
39	Jamaica Estates	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
40	Jamaica Hills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
41	Kew Gardens	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
42	Kew Gardens Hills	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
43	Laurelton	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
44	Lefrak City	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
45	Lindenwood	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
46	Little Neck	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
47	Long Island City	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
48	Malba	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
49	Maspeth	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
50	Middle Village	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
51	Murray Hill	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
52	Neponsit	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
53	North Corona	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
54	Oakland Gardens	0.083333	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
55	Ozone Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
56	Pomonok	0.000000	0.000000	0.000000	0.000000	0.090909	0.000000	0.00
57	Queens Village	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
58	Queensboro Hill	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
59	Queensbridge	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
60	Ravenswood	0.000000	0.000000	0.038462	0.000000	0.000000	0.000000	0.00
61	Rego Park	0.000000	0.000000	0.000000	0.000000	0.021739	0.000000	0.00

	Neighborhood	Yoga Studio	Accessories Store	Afghan Restaurant	Airport Terminal	American Restaurant	Arepa Restaurant	Argentin Restau
62	Richmond Hill	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
63	Ridgewood	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
64	Rochdale	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
65	Rockaway Beach	0.000000	0.000000	0.000000	0.000000	0.017241	0.034483	0.00
66	Rockaway Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
67	Rosedale	0.000000	0.066667	0.000000	0.000000	0.000000	0.000000	0.00
68	Roxbury	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
69	Somerville	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
70	South Jamaica	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
71	South Ozone Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
72	Springfield Gardens	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
73	St. Albans	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
74	Steinway	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
75	Sunnyside	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
76	Sunnyside Gardens	0.000000	0.000000	0.000000	0.000000	0.040000	0.000000	0.00
77	Utopia	0.000000	0.000000	0.058824	0.000000	0.000000	0.000000	0.00
78	Whitestone	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
79	Woodhaven	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
80	Woodside	0.000000	0.000000	0.000000	0.000000	0.040000	0.013333	0.00

In [52]:

```
Queens_grouped.shape
```

Out[52]:

(81, 273)

In [53]:

```
num_top_venues = 5

for hood in Queens_grouped['Neighborhood']:
    print("-----"+hood+"-----")
    temp = Queens_grouped[Queens_grouped['Neighborhood'] == hood].T.reset_index()
    temp.columns = ['venue', 'freq']
    temp = temp.iloc[1:]
    temp['freq'] = temp['freq'].astype(float)
    temp = temp.round({'freq': 2})
    print(temp.sort_values('freq', ascending=False).reset_index(drop=True).head(num_top_venues))
    print('\n')
```

----Arverne----

	venue	freq
0	Surf Spot	0.22
1	Metro Station	0.11
2	Sandwich Place	0.11
3	Thai Restaurant	0.06
4	Pizza Place	0.06

----Astoria----

	venue	freq
0	Middle Eastern Restaurant	0.07
1	Hookah Bar	0.06
2	Bar	0.06
3	Greek Restaurant	0.05
4	Seafood Restaurant	0.04

----Astoria Heights----

	venue	freq
0	Italian Restaurant	0.15
1	Liquor Store	0.08
2	Playground	0.08
3	Bus Station	0.08
4	Supermarket	0.08

----Auburndale----

	venue	freq
0	Korean Restaurant	0.06
1	Furniture / Home Store	0.06
2	Bar	0.06
3	Pharmacy	0.06
4	Supermarket	0.06

----Bay Terrace----

	venue	freq
0	Clothing Store	0.12
1	Women's Store	0.05
2	Kids Store	0.05
3	Mobile Phone Shop	0.05
4	Shoe Store	0.05

----Bayside----

	venue	freq
0	Bar	0.09
1	Pizza Place	0.04
2	Mexican Restaurant	0.04
3	Sushi Restaurant	0.04
4	American Restaurant	0.04

----Bayswater----

	venue	freq
0	Park	0.5

1	Playground	0.5
2	Yoga Studio	0.0
3	Nail Salon	0.0
4	Other Great Outdoors	0.0

----Beechhurst----

	venue	freq
0	Yoga Studio	0.06
1	Gym	0.06
2	Dessert Shop	0.06
3	Convenience Store	0.06
4	Construction & Landscaping	0.06

----Bellaire----

	venue	freq
0	Deli / Bodega	0.17
1	Chinese Restaurant	0.17
2	Convenience Store	0.08
3	Moving Target	0.08
4	Coffee Shop	0.08

----Belle Harbor----

	venue	freq
0	Beach	0.17
1	Deli / Bodega	0.11
2	Spa	0.11
3	Donut Shop	0.06
4	Mexican Restaurant	0.06

----Bellerose----

	venue	freq
0	Deli / Bodega	0.09
1	Italian Restaurant	0.09
2	Chinese Restaurant	0.09
3	Pizza Place	0.09
4	Donut Shop	0.04

----Blissville----

	venue	freq
0	Hotel	0.18
1	Bus Station	0.09
2	Donut Shop	0.09
3	Deli / Bodega	0.09
4	Skating Rink	0.05

----Breezy Point----

	venue	freq
0	Monument / Landmark	0.25
1	Beach	0.25
2	Trail	0.25
3	Board Shop	0.25

4 New American Restaurant 0.00

----Briarwood----

	venue	freq
0	Deli / Bodega	0.14
1	Coffee Shop	0.14
2	Indian Restaurant	0.07
3	Arts & Crafts Store	0.07
4	Fast Food Restaurant	0.07

----Broad Channel----

	venue	freq
0	Deli / Bodega	0.33
1	Park	0.17
2	Dive Bar	0.17
3	Pizza Place	0.17
4	Other Nightlife	0.17

----Brookville----

	venue	freq
0	Deli / Bodega	1.0
1	Yoga Studio	0.0
2	Nail Salon	0.0
3	Other Nightlife	0.0
4	Other Great Outdoors	0.0

----Cambria Heights----

	venue	freq
0	Caribbean Restaurant	0.29
1	Bakery	0.06
2	Bus Station	0.06
3	Bus Stop	0.06
4	Jewelry Store	0.06

----College Point----

	venue	freq
0	Deli / Bodega	0.07
1	Pizza Place	0.07
2	Asian Restaurant	0.05
3	Pharmacy	0.05
4	Latin American Restaurant	0.05

----Corona----

	venue	freq
0	Mexican Restaurant	0.14
1	Deli / Bodega	0.05
2	Latin American Restaurant	0.05
3	Park	0.05
4	School	0.05

----Douglaston----

	venue	freq
0	Shipping Store	0.09
1	Deli / Bodega	0.09
2	Bank	0.09
3	Yoga Studio	0.05
4	Doctor's Office	0.05

----East Elmhurst----

	venue	freq
0	Donut Shop	0.27
1	Rental Car Location	0.09
2	Supermarket	0.09
3	Coffee Shop	0.09
4	Lake	0.09

----Edgemere----

	venue	freq
0	Metro Station	0.14
1	Pizza Place	0.14
2	Deli / Bodega	0.07
3	Asian Restaurant	0.07
4	Bus Station	0.07

----Elmhurst----

	venue	freq
0	Thai Restaurant	0.17
1	Mexican Restaurant	0.14
2	South American Restaurant	0.07
3	Chinese Restaurant	0.07
4	Bubble Tea Shop	0.05

----Far Rockaway----

	venue	freq
0	Pizza Place	0.13
1	Chinese Restaurant	0.10
2	Caribbean Restaurant	0.06
3	Grocery Store	0.06
4	Supermarket	0.06

----Floral Park----

	venue	freq
0	Indian Restaurant	0.25
1	Grocery Store	0.25
2	Basketball Court	0.25
3	Pizza Place	0.25
4	Moving Target	0.00

----Flushing----

	venue	freq
0	Chinese Restaurant	0.09

1	Hotpot Restaurant	0.07
2	Asian Restaurant	0.05
3	Bakery	0.05
4	Bubble Tea Shop	0.05

----Forest Hills----

	venue	freq
0	Gym / Fitness Center	0.08
1	Gym	0.08
2	Yoga Studio	0.05
3	Thai Restaurant	0.05
4	Park	0.05

----Forest Hills Gardens----

	venue	freq
0	Bakery	0.10
1	Dessert Shop	0.05
2	Bagel Shop	0.05
3	Business Service	0.05
4	Food & Drink Shop	0.05

----Fresh Meadows----

	venue	freq
0	Bus Station	0.20
1	Chinese Restaurant	0.13
2	Pizza Place	0.07
3	Grocery Store	0.07
4	Locksmith	0.07

----Glen Oaks----

	venue	freq
0	Pharmacy	0.14
1	Mobile Phone Shop	0.10
2	Fast Food Restaurant	0.05
3	Clothing Store	0.05
4	Park	0.05

----Glendale----

	venue	freq
0	Arts & Crafts Store	0.25
1	Food & Drink Shop	0.25
2	Chinese Restaurant	0.25
3	Brewery	0.25
4	Movie Theater	0.00

----Hammels----

	venue	freq
0	Beach	0.26
1	Building	0.05
2	Gym / Fitness Center	0.05
3	Diner	0.05

4 Playground 0.05

----Hillcrest----

	venue	freq
0	Donut Shop	0.10
1	Dim Sum Restaurant	0.05
2	Market	0.05
3	Food Court	0.05
4	Snack Place	0.05

----Hollis----

	venue	freq
0	Park	0.1
1	Fried Chicken Joint	0.1
2	Baseball Field	0.1
3	Sandwich Place	0.1
4	Shopping Mall	0.1

----Holliswood----

	venue	freq
0	Mobile Phone Shop	0.25
1	Supermarket	0.25
2	Playground	0.25
3	Donut Shop	0.25
4	Nail Salon	0.00

----Howard Beach----

	venue	freq
0	Italian Restaurant	0.08
1	Clothing Store	0.04
2	Construction & Landscaping	0.04
3	Gym	0.04
4	Fast Food Restaurant	0.04

----Hunters Point----

	venue	freq
0	Italian Restaurant	0.06
1	Café	0.06
2	Japanese Restaurant	0.04
3	Coffee Shop	0.03
4	Burger Joint	0.03

----Jackson Heights----

	venue	freq
0	Latin American Restaurant	0.11
1	Peruvian Restaurant	0.06
2	South American Restaurant	0.05
3	Bakery	0.05
4	Spanish Restaurant	0.04

----Jamaica Center----

	venue	freq
0	Mobile Phone Shop	0.09
1	Clothing Store	0.07
2	Sandwich Place	0.07
3	Mexican Restaurant	0.04
4	Fried Chicken Joint	0.04

----Jamaica Estates----

	venue	freq
0	Intersection	0.25
1	Eye Doctor	0.25
2	Dog Run	0.25
3	Bus Station	0.25
4	Yoga Studio	0.00

----Jamaica Hills----

	venue	freq
0	Indian Restaurant	0.12
1	Pharmacy	0.12
2	Fried Chicken Joint	0.08
3	Donut Shop	0.08
4	Fast Food Restaurant	0.08

----Kew Gardens----

	venue	freq
0	Chinese Restaurant	0.06
1	Pizza Place	0.04
2	Donut Shop	0.04
3	Park	0.04
4	Bar	0.04

----Kew Gardens Hills----

	venue	freq
0	Bank	0.15
1	Playground	0.10
2	Pizza Place	0.10
3	Bus Station	0.10
4	Convenience Store	0.05

----Laurelton----

	venue	freq
0	Caribbean Restaurant	0.50
1	Cosmetics Shop	0.17
2	Train Station	0.17
3	Park	0.17
4	Polish Restaurant	0.00

----Lefrak City----

	venue	freq
0	Department Store	0.07

1	Bakery	0.07
2	Cosmetics Shop	0.07
3	Fried Chicken Joint	0.04
4	Shopping Mall	0.04

----Lindenwood----

	venue	freq
0	Liquor Store	0.08
1	Bakery	0.08
2	Deli / Bodega	0.08
3	Japanese Restaurant	0.08
4	Gym	0.08

----Little Neck----

	venue	freq
0	Chinese Restaurant	0.07
1	Italian Restaurant	0.07
2	Deli / Bodega	0.07
3	Bakery	0.07
4	Shipping Store	0.04

----Long Island City----

	venue	freq
0	Coffee Shop	0.10
1	Hotel	0.10
2	Mexican Restaurant	0.05
3	Café	0.05
4	Bar	0.05

----Malba----

	venue	freq
0	Tennis Court	0.33
1	Rest Area	0.33
2	Rock Club	0.33
3	Yoga Studio	0.00
4	Music Venue	0.00

----Maspeth----

	venue	freq
0	Diner	0.10
1	Pizza Place	0.10
2	Bank	0.06
3	Mobile Phone Shop	0.06
4	Grocery Store	0.06

----Middle Village----

	venue	freq
0	Dessert Shop	0.06
1	Playground	0.06
2	Park	0.06
3	Chinese Restaurant	0.06

4 Sushi Restaurant 0.06

----Murray Hill----

	venue	freq
0	Korean Restaurant	0.46
1	Supermarket	0.04
2	Coffee Shop	0.04
3	Bar	0.04
4	Bank	0.04

----Neponsit----

	venue	freq
0	Beach	0.8
1	Beach Bar	0.2
2	Yoga Studio	0.0
3	New American Restaurant	0.0
4	Other Great Outdoors	0.0

----North Corona----

	venue	freq
0	Deli / Bodega	0.16
1	Pizza Place	0.08
2	Spanish Restaurant	0.08
3	Bakery	0.08
4	Latin American Restaurant	0.08

----Oakland Gardens----

	venue	freq
0	Korean Restaurant	0.17
1	Yoga Studio	0.08
2	Chinese Restaurant	0.08
3	Donut Shop	0.08
4	Taiwanese Restaurant	0.04

----Ozone Park----

	venue	freq
0	Pizza Place	0.09
1	Diner	0.06
2	Fast Food Restaurant	0.06
3	Gym	0.06
4	Pharmacy	0.06

----Pomonok----

	venue	freq
0	Scenic Lookout	0.09
1	Park	0.09
2	American Restaurant	0.09
3	Supermarket	0.09
4	Japanese Restaurant	0.09

----Queens Village----

	venue	freq
0	Bus Stop	0.12
1	Bank	0.12
2	Donut Shop	0.06
3	Bakery	0.06
4	Sandwich Place	0.06

----Queensboro Hill----

	venue	freq
0	Chinese Restaurant	0.20
1	Bank	0.08
2	Bakery	0.08
3	Playground	0.04
4	Hobby Shop	0.04

----Queensbridge----

	venue	freq
0	Hotel	0.20
1	Sandwich Place	0.13
2	Baseball Field	0.07
3	Roof Deck	0.07
4	Park	0.07

----Ravenswood----

	venue	freq
0	Chinese Restaurant	0.12
1	Italian Restaurant	0.08
2	Grocery Store	0.08
3	Bagel Shop	0.04
4	Diner	0.04

----Rego Park----

	venue	freq
0	Bakery	0.09
1	Sandwich Place	0.07
2	Grocery Store	0.07
3	Mediterranean Restaurant	0.04
4	Sushi Restaurant	0.04

----Richmond Hill----

	venue	freq
0	Discount Store	0.08
1	Caribbean Restaurant	0.08
2	Latin American Restaurant	0.08
3	Pizza Place	0.08
4	Lounge	0.08

----Ridgewood----

	venue	freq
0	Grocery Store	0.06

1	Greek Restaurant	0.06
2	Mobile Phone Shop	0.06
3	Pizza Place	0.06
4	Bank	0.06

----Rochdale----

	venue	freq
0	Bus Stop	0.09
1	Market	0.09
2	Southern / Soul Food Restaurant	0.09
3	Pharmacy	0.09
4	Pizza Place	0.09

----Rockaway Beach----

	venue	freq
0	Beach	0.14
1	Deli / Bodega	0.05
2	Pizza Place	0.05
3	Brazilian Restaurant	0.03
4	Bagel Shop	0.03

----Rockaway Park----

	venue	freq
0	Beach	0.19
1	Bank	0.07
2	Donut Shop	0.07
3	Pizza Place	0.07
4	Gas Station	0.04

----Rosedale----

	venue	freq
0	Cosmetics Shop	0.13
1	Fried Chicken Joint	0.07
2	Liquor Store	0.07
3	Pharmacy	0.07
4	Sandwich Place	0.07

----Roxbury----

	venue	freq
0	Beach	0.2
1	Fast Food Restaurant	0.1
2	Baseball Field	0.1
3	Trail	0.1
4	Pizza Place	0.1

----Somerville----

	venue	freq
0	Park	1.0
1	Nail Salon	0.0
2	Other Nightlife	0.0
3	Other Great Outdoors	0.0

4 Optical Shop 0.0

----South Jamaica----

	venue	freq
0	Bus Station	0.29
1	Ice Cream Shop	0.14
2	Supermarket	0.14
3	Bakery	0.14
4	Caribbean Restaurant	0.14

----South Ozone Park----

	venue	freq
0	Deli / Bodega	0.23
1	Park	0.15
2	Fast Food Restaurant	0.15
3	Gym / Fitness Center	0.08
4	Sandwich Place	0.08

----Springfield Gardens----

	venue	freq
0	Donut Shop	0.12
1	Bus Station	0.12
2	Fried Chicken Joint	0.12
3	Fast Food Restaurant	0.06
4	Shoe Store	0.06

----St. Albans----

	venue	freq
0	Caribbean Restaurant	0.19
1	Deli / Bodega	0.12
2	Fast Food Restaurant	0.12
3	Dance Studio	0.06
4	Donut Shop	0.06

----Steinway----

	venue	freq
0	Rental Car Location	0.12
1	Sushi Restaurant	0.08
2	Italian Restaurant	0.08
3	Deli / Bodega	0.08
4	Women's Store	0.04

----Sunnyside----

	venue	freq
0	Pizza Place	0.10
1	South American Restaurant	0.08
2	Italian Restaurant	0.08
3	Chinese Restaurant	0.05
4	Coffee Shop	0.05

----Sunnyside Gardens----

	venue	freq
0	Bar	0.07
1	Grocery Store	0.05
2	Coffee Shop	0.04
3	American Restaurant	0.04
4	Turkish Restaurant	0.03

----Utopia----

	venue	freq
0	Deli / Bodega	0.12
1	Automotive Shop	0.06
2	Basketball Court	0.06
3	History Museum	0.06
4	Bakery	0.06

----Whitestone----

	venue	freq
0	Bubble Tea Shop	0.17
1	Train	0.17
2	Deli / Bodega	0.17
3	Candy Store	0.17
4	Moving Target	0.17

----Woodhaven----

	venue	freq
0	Deli / Bodega	0.12
1	Park	0.08
2	Pharmacy	0.08
3	Bank	0.08
4	Latin American Restaurant	0.04

----Woodside----

	venue	freq
0	Grocery Store	0.08
1	Thai Restaurant	0.07
2	Bakery	0.05
3	Latin American Restaurant	0.05
4	Filipino Restaurant	0.05

In [54]:

```
def return_most_common_venues(row, num_top_venues):
    row_categories = row.iloc[1:]
    row_categories_sorted = row_categories.sort_values(ascending=False)

    return row_categories_sorted.index.values[0:num_top_venues]
```


In [55]:

```

num_top_venues = 10

indicators = ['st', 'nd', 'rd']

# create columns according to number of top venues
columns = ['Neighborhood']
for ind in np.arange(num_top_venues):
    try:
        columns.append('{}{} Most Common Venue'.format(ind+1, indicators[ind]))
    except:
        columns.append('{}th Most Common Venue'.format(ind+1))

# create a new dataframe
neighborhoods_venues_sorted = pd.DataFrame(columns=columns)
neighborhoods_venues_sorted['Neighborhood'] = Queens_grouped['Neighborhood']

for ind in np.arange(Queens_grouped.shape[0]):
    neighborhoods_venues_sorted.iloc[ind, 1:] = return_most_common_venues(Queens_grouped.i
loc[ind, :], num_top_venues)

neighborhoods_venues_sorted.head()

```

Out[55]:

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue
0	Arverne	Surf Spot	Metro Station	Sandwich Place	Bus Stop	Thai Restaurant	Bed & Breakfast	Donut Shop
1	Astoria	Middle Eastern Restaurant	Hookah Bar	Bar	Greek Restaurant	Seafood Restaurant	Salon / Barbershop	
2	Astoria Heights	Italian Restaurant	Playground	Plaza	Bus Station	Bowling Alley	Supermarket	Liquor Store
3	Auburndale	Hookah Bar	Discount Store	Fast Food Restaurant	Miscellaneous Shop	Mobile Phone Shop	Furniture / Home Store	Supermarket
4	Bay Terrace	Clothing Store	Women's Store	Donut Shop	Shoe Store	Mobile Phone Shop	Cosmetics Shop	Art Res

7. Cluster Neighborhoods

In [56]:

```
# set number of clusters
kclusters = 5

Queens_grouped_clustering = Queens_grouped.drop('Neighborhood', 1)

# run k-means clustering
kmeans = KMeans(n_clusters=kclusters, random_state=0).fit(Queens_grouped_clustering)

# check cluster labels generated for each row in the dataframe
kmeans.labels_[0:10]
```

Out[56]:

```
array([2, 2, 2, 2, 2, 2, 0, 2, 2, 2], dtype=int32)
```

In [57]:

```
# add clustering labels
neighborhoods_venues_sorted.insert(0, 'Cluster Labels', kmeans.labels_)

Queens_merged = Queens_data
Queens_merged = Queens_merged.join(neighborhoods_venues_sorted.set_index('Neighborhood'),
on='Neighborhood')

Queens_merged.head() # check the last columns!
```

Out[57]:

	Borough	Neighborhood	Latitude	Longitude	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4 C
0	Queens	Astoria	40.768509	-73.915654	2	Middle Eastern Restaurant	Hookah Bar	Bar	Re
1	Queens	Woodside	40.746349	-73.901842	2	Grocery Store	Thai Restaurant	Latin American Restaurant	Re
2	Queens	Jackson Heights	40.751981	-73.882821	2	Latin American Restaurant	Peruvian Restaurant	South American Restaurant	
3	Queens	Elmhurst	40.744049	-73.881656	2	Thai Restaurant	Mexican Restaurant	South American Restaurant	Re
4	Queens	Howard Beach	40.654225	-73.838138	2	Italian Restaurant	Fast Food Restaurant	Bagel Shop	

In [58]:

```
# create map
map_clusters = folium.Map(location=[latitude, longitude], zoom_start=11)

# set color scheme for the clusters
x = np.arange(kclusters)
ys = [i + x + (i*x)**2 for i in range(kclusters)]
colors_array = cm.rainbow(np.linspace(0, 1, len(ys)))
rainbow = [colors.rgb2hex(i) for i in colors_array]

# add markers to the map
markers_colors = []
for lat, lon, poi, cluster in zip(Queens_merged['Latitude'], Queens_merged['Longitude'], Queens_merged['Neighborhood'], Queens_merged['Cluster Labels']):
    label = folium.Popup(str(poi) + ' Cluster ' + str(cluster), parse_html=True)
    folium.CircleMarker(
        [lat, lon],
        radius=5,
        popup=label,
        color=rainbow[cluster-1],
        fill=True,
        fill_color=rainbow[cluster-1],
        fill_opacity=0.7).add_to(map_clusters)

map_clusters
```

Out[58]:

8. Examine Clusters

Cluster 1

In [59]:

```
Queens_merged.loc[Queens_merged['Cluster Labels'] == 0, Queens_merged.columns[[1] + list(range(5, Queens_merged.shape[1]))]]
```

Out[59]:

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue
63	Somerville	Park	Women's Store	Falafel Restaurant	Egyptian Restaurant	Electronics Store	Empanada Restaurant	Event Space
79	Bayswater	Park	Playground	Women's Store	Falafel Restaurant	Egyptian Restaurant	Electronics Store	Empanada Restaurant

Cluster 2

In [60]:

```
Queens_merged.loc[Queens_merged['Cluster Labels'] == 1, Queens_merged.columns[[1] + list(range(5, Queens_merged.shape[1]))]]
```

Out[60]:

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue
50	Neponsit	Beach	Beach Bar	Women's Store	Farm	Empanada Restaurant	Event Space	Eye Doctor	Rest

Cluster 3

In [56]:

```
Queens_merged.loc[Queens_merged['Cluster Labels'] == 2, Queens_merged.columns[[1] + list(range(5, Queens_merged.shape[1]))]]
```

Out[56]:

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue
0	Astoria	Middle Eastern Restaurant	Bar	Hookah Bar	Greek Restaurant	Seafood Restaurant	Bakery
2	Jackson Heights	Latin American Restaurant	Peruvian Restaurant	South American Restaurant	Bakery	Mexican Restaurant	Spanish Restaurant
3	Elmhurst	Thai Restaurant	Mexican Restaurant	South American Restaurant	Chinese Restaurant	Bubble Tea Shop	Vietnamese Restaurant
4	Howard Beach	Bagel Shop	Italian Restaurant	Pharmacy	Gym	Ice Cream Shop	Sandwich Place
6	Forest Hills	Gym / Fitness Center	Gym	Yoga Studio	Pharmacy	Convenience Store	Park
7	Kew Gardens	Chinese Restaurant	Spa	Indian Restaurant	Bar	Bank	Donut Shop
9	Flushing	Chinese Restaurant	Korean Restaurant	Hotpot Restaurant	Bubble Tea Shop	Bakery	Szechuan Restaurant
10	Long Island City	Hotel	Coffee Shop	Mexican Restaurant	Café	Pizza Place	Bar
11	Sunnyside	Pizza Place	Italian Restaurant	Bakery	Hotel	South American Restaurant	Discount Store
15	Glendale	Park	Arts & Crafts Store	Brewery	Chinese Restaurant	Food & Drink Shop	Food
16	Rego Park	Bakery	Grocery Store	Sandwich Place	Donut Shop	Pizza Place	Pharmacy
19	South Ozone Park	Deli / Bodega	Park	Fast Food Restaurant	Bar	Gym / Fitness Center	Sandwich Place
21	Whitestone	Train	Dance Studio	Deli / Bodega	Candy Store	Bubble Tea Shop	Moving Target
22	Bayside	Bar	Pizza Place	Sushi Restaurant	American Restaurant	Pub	Indian Restaurant
23	Auburndale	Bar	Train	Miscellaneous Shop	Fast Food Restaurant	Furniture / Home Store	Supermarket
24	Little Neck	Deli / Bodega	Italian Restaurant	Chinese Restaurant	Bakery	Korean Restaurant	Shanghai Restaurant
25	Douglaston	Deli / Bodega	Chinese Restaurant	Bank	Shipping Store	Convenience Store	Doctor's Office
29	Fresh Meadows	Bus Station	Chinese Restaurant	Train	Food Truck	Grocery Store	Pharmacy

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue
30	Briarwood	Deli / Bodega	Coffee Shop	Arts & Crafts Store	Bus Station	Mexican Restaurant	Fast Food Restaurant
31	Jamaica Center	Mobile Phone Shop	Clothing Store	Sandwich Place	Department Store	Mexican Restaurant	Pizza Place
32	Oakland Gardens	Chinese Restaurant	Korean Restaurant	Donut Shop	Yoga Studio	Pizza Place	Ice Cream Shop
34	Hollis	Sandwich Place	Shopping Mall	Baseball Field	Park	Fried Chicken Joint	Electronics Store
35	South Jamaica	Bus Station	Ice Cream Shop	Bakery	Supermarket	Caribbean Restaurant	Grocery Store
36	St. Albans	Caribbean Restaurant	Deli / Bodega	Fast Food Restaurant	Dance Studio	Donut Shop	Shopping Mall
38	Springfield Gardens	Bus Station	Fried Chicken Joint	Donut Shop	Gym	Check Cashing Service	Laundromat
39	Cambria Heights	Caribbean Restaurant	Health Food Store	Gym / Fitness Center	Moving Target	Cosmetics Shop	Liquor Store
40	Rosedale	Cosmetics Shop	Bus Station	Fried Chicken Joint	Jewelry Store	Pharmacy	Sandwich Place
44	Steinway	Rental Car Location	Deli / Bodega	Cosmetics Shop	Sushi Restaurant	Women's Store	Donut Shop
45	Beechhurst	Chinese Restaurant	Outdoors & Recreation	Health & Beauty Service	Boutique	Shopping Mall	Supermarket
46	Bay Terrace	Clothing Store	Women's Store	American Restaurant	Lingerie Store	Mobile Phone Shop	Kids Store
49	Rockaway Beach	Beach	Deli / Bodega	Pizza Place	Brazilian Restaurant	Latin American Restaurant	Arepa Restaurant
51	Murray Hill	Korean Restaurant	Bank	Bar	Coffee Shop	Supermarket	Fried Chicken Joint
55	Queensboro Hill	Chinese Restaurant	Bank	Bakery	Frozen Yogurt Shop	Asian Restaurant	Playground
57	Ravenswood	Chinese Restaurant	Grocery Store	Italian Restaurant	Deli / Bodega	Bagel Shop	Fried Chicken Joint
59	Laurelton	Caribbean Restaurant	Park	Train Station	Farmers Market	Electronics Store	Empanada Restaurant
60	Lefrak City	Cosmetics Shop	Department Store	Bakery	Shopping Mall	Supermarket	Liquor Store
61	Belle Harbor	Beach	Spa	Deli / Bodega	Mexican Restaurant	Chinese Restaurant	Bakery
65	Bellaire	Chinese Restaurant	Italian Restaurant	Moving Target	Bus Station	Supermarket	Greek Restaurant

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue
68	Jamaica Hills	Pharmacy	Fried Chicken Joint	Indian Restaurant	Chinese Restaurant	Donut Shop	Halal Restaurant
71	Astoria Heights	Burger Joint	Bus Station	Liquor Store	Gourmet Shop	Food	Bakery
72	Hunters Point	Café	Italian Restaurant	Japanese Restaurant	Wine Shop	Wine Bar	Event Space
73	Sunnyside Gardens	Bar	Grocery Store	American Restaurant	Thai Restaurant	Pizza Place	Coffee Shop
74	Blissville	Hotel	Donut Shop	Bus Station	Bar	Deli / Bodega	Rental Service
77	Malba	Rock Club	Rest Area	Tennis Court	Fast Food Restaurant	Electronics Store	Empanada Restaurant
78	Hammels	Beach	Deli / Bodega	Dog Run	Shoe Store	Gym / Fitness Center	Café
80	Queensbridge	Hotel	Sandwich Place	Scenic Lookout	Athletics & Sports	Platform	Hotel Bar

Cluster 4

In [61]:

```
Queens_merged.loc[Queens_merged['Cluster Labels'] == 3, Queens_merged.columns[[1] + list(range(5, Queens_merged.shape[1]))]]
```

Out[61]:

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue
64	Brookville	Deli / Bodega	Women's Store	Farmers Market	Electronics Store	Empanada Restaurant	Event Space	Eye Doctor	Re:

Cluster 5

In [62]:

```
Queens_merged.loc[Queens_merged['Cluster Labels'] == 4, Queens_merged.columns[[1] + list(range(5, Queens_merged.shape[1]))]]
```

Out[62]:

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue
54	Jamaica Estates	Dog Run	Intersection	Eye Doctor	Bus Station	Women's Store	Farm	Electronics Store	Er Re

In []:

In []:

In []: