

Team id:PNT2022TMID49101

**PROJECT NAME:SMART WASTE MANAGEMENT SYSTEM FOR
METROPOLITAN CITIES**

DEVELOP A PYHTON SCRIPT

```
from opencage.geocoder import OpenCageGeocode

key = YOUR_API_KEY

geocoder = OpenCageGeocode(key)

query = 'Bijuesca, Spain'

results = geocoder.geocode(query)

print (results)

lat = results[0]['geometry']['lat']

lng = results[0]['geometry']['lng']

print (lat, lng)

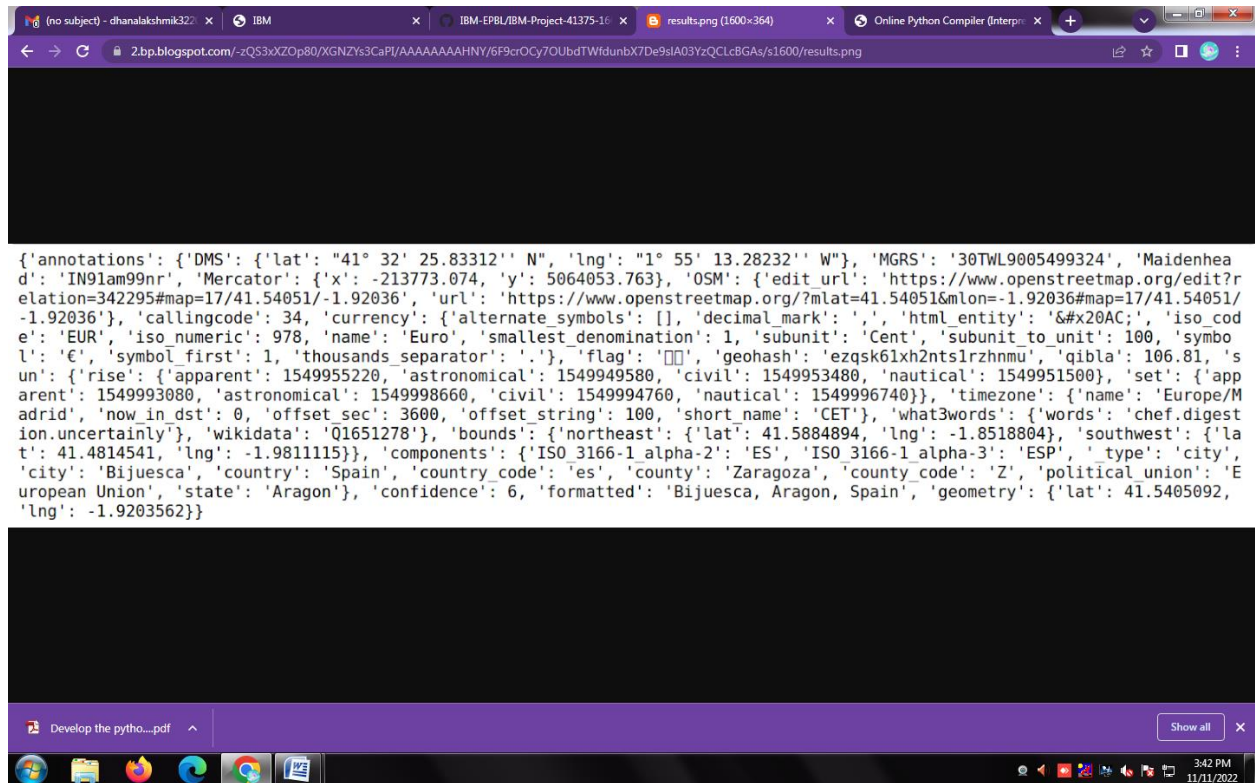
list_lat = []
list_long = []

for index, row in df_crime_more_cities.iterrows():

    City = row['City']
    State = row['State']
    query = str(City)+', '+str(State)

    results = geocoder.geocode(query)
    lat = results[0]['geometry']['lat']
    long = results[0]['geometry']['lng']

    list_lat.append(lat)
    list_long.append(long)
```



Browser window showing a table of data. The table has columns for City, State, and years from 1985 to 2014, followed by lat and lon. The data is displayed in a grid format with alternating row colors. The browser tabs include "no subject", "dhanalakshmik322", "IBM", "IBM-EPBL/IBM-Project-41375-16", "new_data.png (1527x463)", and "Online Python Compiler (Interpr...". The address bar shows a URL from 4.bp.blogspot.com. The taskbar at the bottom shows various application icons and the system clock indicating 3:42 PM on 11/11/2022.

	City	State	1985	1986	1987	1988	1989	1990	1991	...	2007	2008	2009	2010	2011	2012	2013	2014	lat	lon
	Birmingham	AL	34.4	30.7	29.8	32.5	36.0	47.0	51.6	...	37.8	35.9	28.6	NaN	25.3	31.4	29.7	24.5	33.520682	-86.802433
	Huntsville	AL	7.3	12.5	9.7	9.2	7.5	11.3	NaN	...	12.4	10.4	7.3	6.7	7.2	7.6	13.0	8.0	34.729847	-86.585901
	Jefferson County Sheriff Department	AL	NaN	NaN	NaN	NaN	NaN	NaN	NaN	...	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	31.294218	-86.381475
	Madison County Sheriff Department	AL	NaN	NaN	NaN	NaN	NaN	NaN	NaN	...	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	34.714507	-86.738861
	Mobile County Sheriff Department	AL	NaN	NaN	NaN	NaN	NaN	NaN	NaN	...	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	30.690208	-88.104363
	Mobile	AL	12.6	22.6	15.6	15.6	19.1	20.9	20.1	...	15.0	16.7	9.7	10.0	11.9	12.7	11.6	12.4	30.694357	-88.043054
	Montgomery	AL	11.8	11.2	11.2	12.9	17.0	18.2	19.0	...	22.8	11.3	15.3	12.1	15.0	21.1	1.5	17.5	32.366966	-86.300648
	Anchorage	AK	6.1	7.1	6.5	6.0	4.9	4.4	10.7	...	7.7	3.6	4.9	4.5	4.0	5.0	4.7	4.0	61.216313	-149.894852
	Chandler	AZ	0.0	5.6	1.4	2.8	1.2	1.1	7.6	...	3.6	2.4	2.0	2.5	0.8	1.6	0.8	0.4	33.306713	-111.840849
	Gilbert	AZ	13.9	11.8	7.4	0.0	0.0	3.4	0.0	...	0.5	0.0	1.7	2.4	0.9	2.3	0.4	0.0	33.352826	-111.789024
	Glendale	AZ	7.6	5.7	9.9	9.0	4.2	10.1	5.3	...	6.0	6.6	7.1	5.3	9.6	5.2	5.6	8.4	33.558997	-112.404683