Done

Bienvenue Thomas AWOUNFOUET de Using Python to Access Web Data

Your answer is correct, score saved.

Calling a JSON API

In this assignment you will write a Python program somewhat similar to http://www.py4e.com/code3/opengeo.py. The program will prompt for a location, contact a web service and retrieve JSON for the web service and parse that data, and retrieve the first **plus_code** from the JSON. An Open Location Code is a textual identifier that is another form of address based on the location of the address.

API End Points

To complete this assignment, you should use this API endpoint that has a static subset of the Open Street Map Data.

```
http://py4e-data.dr-chuck.net/opengeo?
```

This API also has no rate limit so you can test as often as you like. If you visit the URL with no parameters, you get "No address..." response.

To call the API, you need to provide the address that you are requesting as the **q=** parameter that is properly URL encoded using the **urllib.parse.urlencode()** function as shown in http://www.py4e.com/code3/opengeo.py

Test Data / Sample Execution

You can test to see if your program is working with a location of "South Federal University" which will have a **plus_code** of "6FV8QPRJ+VQ".

```
$ python solution.py
Enter location: South Federal University
Retrieving http://...
Retrieved 1466 characters
Plus code 6FV8QPRJ+VQ
```

Turn In

Please run your program to find the **plus_code** for this location:

```
R V College of Engineering
```

Make sure to enter the name and case exactly as above and enter the **plus_code** and your Python code below. Hint: The first five characters of the **plus_code** are "7J4VW ..."

Make sure to retreive the data from the URL specified above and **not** the normal Google API. Your program should work with the Google API - but the **plus_code** may not match for this assignment.

plus_code: 7J4VWGF2+77 Submit Assignment

Python code:

```
    #print(data)
    break


if len(js['features']) == 0:
    print('==== Object not found ====')
    #print(data)
    break

# Extracting latitude and longitude
lat = js['features'][0]['properties']['lat']
lon = js['features'][0]['properties']['lon']
print('lat', lat, 'lon', lon)

# Extracting plus code
plus_code = js['features'][0]['properties'].get('plus_code')
if plus_code and isinstance(plus_code, str):  # Check if 'plus_code' exists and is a string
    print('Plus code:', plus_code)
else:
    print('Plus code not found for this location.')
```