Live Coding - Module 4

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In [1]:

```
import numpy as np
import pandas as pd
import requests
import json
import os
import dotenv
import sys
sys.tracebacklimit = 0 # turn off the error tracebacks
```

In [2]:

```
dotenv.load_dotenv()
```

Out[2]:

```
True
```

In [3]:

```
congresskey= os.getenv('congresskey')
opensecretskey= os.getenv('opensecretskey')
```

In [4]:

```
## headers
r = requests.get("https://httpbin.org/user-agent")
useragent = json.loads(r.text)['user-agent']
headers = {'User-Agent': useragent,
          'From': 'dnw9qk@virginia.edu'}
```

Congress API

In [5]:

```
root = 'https://api.congress.gov/v3'
endpoint = '/member'
parameters = {'api_key': congresskey}
r = requests.get(root + endpoint, params= parameters,
                headers= headers)
r
```

Out[5]:

```
<Response [200]>
```

In [6]:

```
myjson = json.loads(r.text)
memberdf = pd.json_normalize(myjson, record_path=['members'])
memberdf
```

Out[6]:

	bioguideId	name	partyName	state	updateDate	
0	W000253	Weicker, Lowell P., Jr.	Republican	Connecticut	2023-06-28T18:01:33Z	https://api.congress.gov/v3/men
1	NaN	NaN	NaN	NaN	NaN	
2	E000071	Ellzey, Jake	Republican	Texas	2023-06-27T20:12:36Z	https://api.congress.gov/v3/me
3	V000134	Van Duyne, Beth	Republican	Texas	2023-06-27T20:12:36Z	https://api.congress.gov/v3/me
4	S001159	Strickland, Marilyn	Democratic	Washington	2023-06-27T20:12:36Z	https://api.congress.gov/v3/me
5	P000048	Pfluger, August	Republican	Texas	2023-06-27T20:12:36Z	https://api.congress.gov/v3/mer
6	O000086	Owens, Burgess	Republican	Utah	2023-06-27T20:12:36Z	https://api.congress.gov/v3/mer
7	M001213	Moore, Blake D.	Republican	Utah	2023-06-27T20:12:36Z	https://api.congress.gov/v3/me
8	M000194	Mace, Nancy	Republican	South Carolina	2023-06-27T20:12:36Z	https://api.congress.gov/v3/mer
9	J000304	Jackson, Ronny	Republican	Texas	2023-06-27T20:12:36Z	https://api.congress.gov/v3/me
10	G000595	Good, Bob	Republican	Virginia	2023-06-27T20:12:36Z	https://api.congress.gov/v3/mer
11	G000594	Gonzales, Tony	Republican	Texas	2023-06-27T20:12:36Z	https://api.congress.gov/v3/mer
12	F000246	Fallon, Pat	Republican	Texas	2023-06-27T20:12:36Z	https://api.congress.gov/v3/me
13	T000165	Tiffany, Thomas P.	Republican	Wisconsin	2023-06-27T20:12:36Z	https://api.congress.gov/v3/me

	bioguideId	name	partyName	state	updateDate	
14	S001216	Schrier, Kim	Democratic	Washington	2023-06-27T20:12:36Z	https://api.congress.gov/v3/me
15	W000825	Wexton, Jennifer	Democratic	Virginia	2023-06-27T20:12:36Z	https://api.congress.gov/v3/men
16	S001209	Spanberger, Abigail Davis	Democratic	Virginia	2023-06-27T20:12:36Z	https://api.congress.gov/v3/me
17	A000376	Allred, Colin Z.	Democratic	Texas	2023-06-27T20:12:36Z	https://api.congress.gov/v3/me
18	G000587	Garcia, Sylvia R.	Democratic	Texas	2023-06-27T20:12:36Z	https://api.congress.gov/v3/me
19	R000614	Roy, Chip	Republican	Texas	2023-06-27T20:12:36Z	https://api.congress.gov/v3/me

```
In [7]: bioguideId = memberdf.query("state=='Virginia' & district==5").reset_index()['b
        bioguideId
Out[7]: 'G000595'
```

```
In [8]: endpoint = f'/member/{bioguideId}/sponsored-legislation'
```

```
In [9]: endpoint
Out[9]: '/member/G000595/sponsored-legislation'
```

```
In [10]: r = requests.get(root + endpoint, params=parameters, headers= headers)
         r
Out[10]: <Response [200]>
```

```
In [11]: myjson = json.loads(r.text)
         bobgoodbills = pd.json_normalize(myjson, record_path=['sponsoredLegislation'])
```

```
In [12]: bobgoodbills['title'][4]
Out[12]: 'Small Businesses before Bureaucrats Act'
```

```
In [13]: root= 'http://www.opensecrets.org/api/'
         parameters = {'apikey': opensecretskey,
                      'id': 'VA',
                       'output': 'json',
                      'method': 'getLegislators'}
         r= requests.get(root, params = parameters, headers=headers)
         r
```

Out[13]:

```
<Response [200]>
```

In [14]:

```
myjson = json.loads(r.text)
myjson = [x['@attributes'] for x in myjson['response']['legislator']]
valegislators= pd.json_normalize(myjson)
valegislators
```

Out[14]:

	cid	firstlast	lastname	party	office	gender	first_elected	exit_code	comme
0	N00029459	Rob Wittman	Wittman	R	VA01	M	2007	0	
1	N00048315	Jen Kiggans	Kiggans	R	VA02	F	2022	0	
2	N00002147	Bobby Scott	Scott	D	VA03	M	1992	0	
3	N00045557	Bob Good	Good	R	VA05	M	2020	0	
4	N00042296	Ben Cline	Cline	R	VA06	M	2018	0	
5	N00041418	Abigail Spanberger	Spanberger	D	VA07	F	2018	0	
6	N00036018	Don Beyer	Beyer	D	VA08	M	2014	0	
7	N00032029	Morgan Griffith	Griffith	R	VA09	M	2010	0	
8	N00041002	Jennifer Wexton	Wexton	D	VA10	F	2018	0	
9	N00029891	Gerry Connolly	Connolly	D	VA11	M	2008	0	
10	N00033177	Tim Kaine	Kaine	D	VAS1	M	2012	0	
11	N00002097	Mark Warner	Warner	D	VAS2	M	2008	0	

12 rows × 21 columns

In [15]:
```
bobgoodid= valegislators.query('lastname=="Good"').reset_index()['cid'][0]
bobgoodid
```

Out[15]:
```
'N00045557'
```

In [16]:
```
parameters = {'method': 'candContrib',
               'apikey': opensecretskey,
              'cid': bobgoodid,
              'output': 'json'}
r= requests.get(root, params = parameters, headers=headers)
r
```

Out[16]:
```
<Response [200]>
```

In [17]:
```
json.loads(r.text)['response']['contributors']['contributor']
```

Out[17]:
```
[{'@attributes': {'org_name': 'RST Marketing',
   'total': '15200',
   'pacs': '0',
   'indivs': '15200'}},
 {'@attributes': {'org_name': 'Liberty University',
   'total': '14567',
   'pacs': '0',
   'indivs': '14567'}},
 {'@attributes': {'org_name': 'Amelia Overhead Doors',
   'total': '11200',
   'pacs': '0',
   'indivs': '11200'}},
 {'@attributes': {'org_name': 'Law Offices Hiepler & Hiepler',
   'total': '11200',
   'pacs': '0',
   'indivs': '11200'}},
 {'@attributes': {'org_name': 'Justice Retail Operations',
   'total': '10800',
   'pacs': '0',
   'indivs': '10800'}},
 {'@attributes': {'org_name': 'Virginia Wagyu Farm',
   'total': '8400',
   'pacs': '0',
   'indivs': '8400'}},
 {'@attributes': {'org_name': 'Ariel Corp',
   'total': '5600',
   'pacs': '0',
   'indivs': '5600'}},
 {'@attributes': {'org_name': 'Ashley Grace Bridal',
   'total': '5600',
   'pacs': '0',
   'indivs': '5600'}},
 {'@attributes': {'org_name': 'Byrd Enterprises Unlimited',
   'total': '5600',
   'pacs': '0',
   'indivs': '5600'}},
 {'@attributes': {'org_name': 'CSM Inc',
   'total': '5600',
   'pacs': '0',
   'indivs': '5600'}}]
```

In [ ]: