MAJOR LEAGUE HACKING TAKE HOME CHALLENGE

How to make three API calls using the Hacker News API in Python?

Introduction:

The [Hacker News](#) API allows individuals to retrieve news information on their website:

- The ability to find the newest news.

- Find the latest comments on the website.

- Search for profile changes that a user has made.

Prerequisites:

Before you begin this guide, you need the following:

- You need to set up a local development environment for Python 3. [How to install

  Ubuntu?](#)

- A text editor that you will be comfortable using: [Sublime Text](#), [Atom](#), [Visual Studio Code](#).

- You need a [Hacker News](#) account.

What To Install:

- You need to install Requests using PIP in Terminal.

- Press **CTRL + ALT + T** on your keyboard and type:

- **PIP install requests.**

API Calls:

- **GET -** Requests a resource at the requested URL.

- **OPTIONS -** Indicates which techniques are supported.

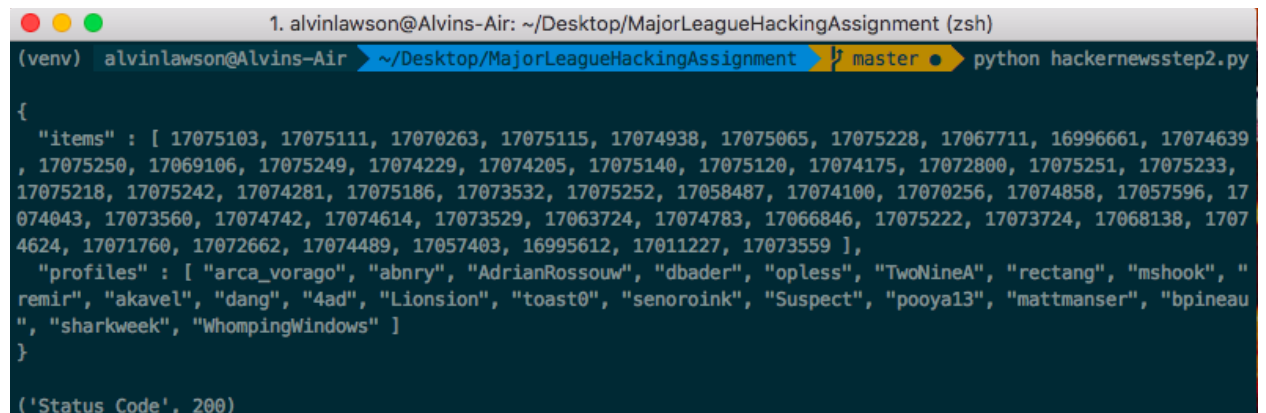- **HEAD -** Returns meta data from the requested URL.

Use:

1. Copy this code:

```
1    import requests
2
3    # Item and profile changes in hackernews
4
5    # Requests a resource at the requested URL.
6    def hackernewsgetapirequest():
7        req = requests.get('')
8        print (req.text)
9        print ("Status Code", req.status_code)
10
11   # Indicates which techniques are supported.
12   def hackernewsoptionsapirequest():
13       req = requests.options('')
14       print (req.text)
15       print ("Status Code", req.status_code)
16
17   # Returns meta information in that given URL.
18   def hackernewsheadapirequest():
19       req = requests.head('')
20       print (req.text)
21       print ("Status Code", req.status_code)
22
23   # Requests a resource at the requested URL.
24   hackernewsgetapirequest()
25
26   # Indicates which techniques are supported.
27   #hackernewsoptionsapirequest()
28
29   # Returns meta information in that given URL.
30   #hackernewsheadapirequest()
```

2. Copy the code below, indent and paste it on line 7 to make a **GET** API call:

   "req = requests.get('https://hacker-news.firebaseio.com/v0/updates.json?print=pretty')"

3. Run the Python script and it will **GET** the information in JSON.

```
● ● ●          1. alvinlawson@Alvins-Air: ~/Desktop/MajorLeagueHackingAssignment (zsh)
(venv)   alvinlawson@Alvins-Air    ~/Desktop/MajorLeagueHackingAssignment    master ●    python hackernewsstep2.py

{
  "items" : [ 17075103, 17075111, 17070263, 17075115, 17074938, 17075065, 17075228, 17067711, 16996661, 17074639
, 17075250, 17069106, 17075249, 17074229, 17074205, 17075140, 17075120, 17074175, 17072800, 17075251, 17075233,
17075218, 17075242, 17074281, 17075186, 17073532, 17075252, 17058487, 17074100, 17070256, 17074858, 17057596, 17
074043, 17073560, 17074742, 17074614, 17073529, 17063724, 17074783, 17066846, 17075222, 17073724, 17068138, 1707
4624, 17071760, 17072662, 17074489, 17057403, 16995612, 17011227, 17073559 ],
  "profiles" : [ "arca_vorago", "abnry", "AdrianRossouw", "dbader", "opless", "TwoNineA", "rectang", "mshook", "
remir", "akavel", "dang", "4ad", "Lionsion", "toast0", "senoroink", "Suspect", "pooya13", "mattmanser", "bpineau
", "sharkweek", "WhompingWindows" ]
}

('Status Code', 200)
```
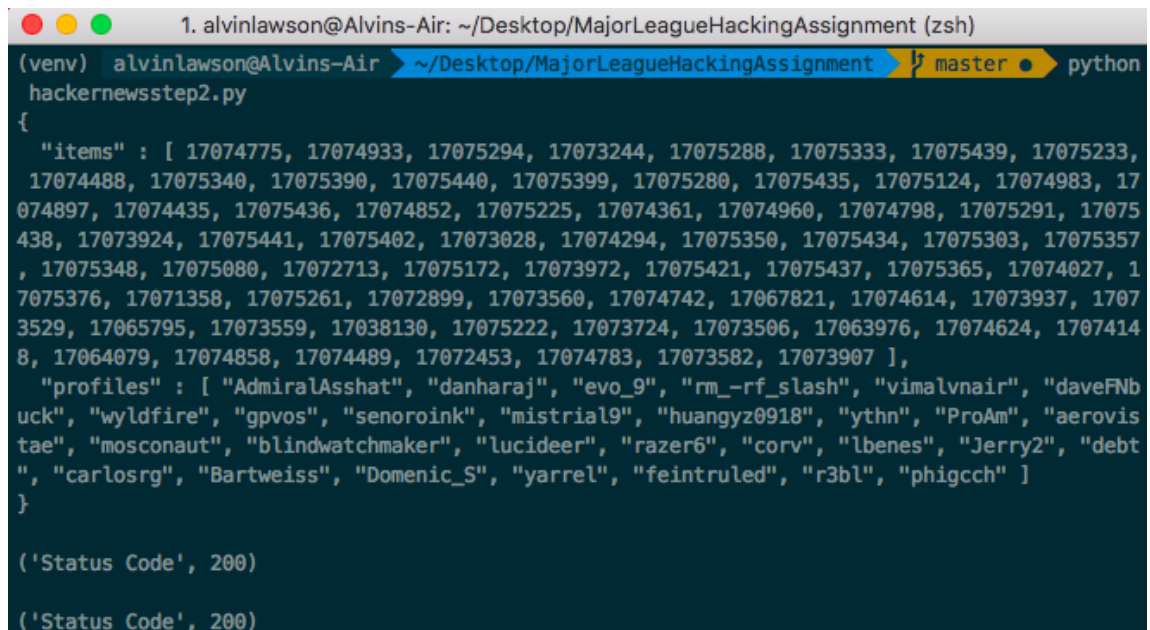
4. Copy the code below, indent and paste it on line 13 to make an **OPTIONS** API call:

"req = requests.options('https://hacker-news.firebaseio.com/v0/updates.json?print=pretty')"

5. Delete the **#** on line 27:

```python
import requests

# Item and profile changes in hackernews

# Requests a resource at the requested URL.
def hackernewsgetapirequest():
    req = requests.get('https://hacker-news.firebaseio.com/v0/updates.json?print=pretty')
    print (req.text)
    print ("Status Code", req.status_code)

# Indicates which techniques are supported.
def hackernewsoptionsapirequest():
    req = requests.options('')
    print (req.text)
    print ("Status Code", req.status_code)

# Returns meta information in that given URL.
def hackernewsheadapirequest():
    req = requests.head('')
    print (req.text)
    print ("Status Code", req.status_code)

# Requests a resource at the requested URL.
hackernewsgetapirequest()

# Indicates which techniques are supported.
#hackernewsoptionsapirequest()

# Returns meta information in that given URL.
#hackernewsheadapirequest()
```

6. Run the Python script to see which **OPTIONS** are supported:

```
●●●        1. alvinlawson@Alvins-Air: ~/Desktop/MajorLeagueHackingAssignment (zsh)
(venv)  alvinlawson@Alvins-Air  ~/Desktop/MajorLeagueHackingAssignment  master ●  python
hackernewsstep2.py
{
  "items" : [ 17074775, 17074933, 17075294, 17073244, 17075288, 17075333, 17075439, 17075233,
 17074488, 17075340, 17075390, 17075440, 17075399, 17075280, 17075435, 17075124, 17074983, 17
074897, 17074435, 17075436, 17074852, 17075225, 17074361, 17074960, 17074798, 17075291, 17075
438, 17073924, 17075441, 17075402, 17073028, 17074294, 17075350, 17075434, 17075303, 17075357
, 17075348, 17075080, 17072713, 17075172, 17073972, 17075421, 17075437, 17075365, 17074027, 1
7075376, 17071358, 17075261, 17072899, 17073560, 17074742, 17067821, 17074614, 17073937, 1707
3529, 17065795, 17073559, 17038130, 17075222, 17073724, 17073506, 17063976, 17074624, 1707414
8, 17064079, 17074858, 17074489, 17072453, 17074783, 17073582, 17073907 ],
  "profiles" : [ "AdmiralAsshat", "danharaj", "evo_9", "rm_-rf_slash", "vimalvnair", "daveFNb
uck", "wyldfire", "gpvos", "senoroink", "mistrial9", "huangyz0918", "ythn", "ProAm", "aerovis
tae", "mosconaut", "blindwatchmaker", "lucideer", "razer6", "corv", "lbenes", "Jerry2", "debt
", "carlosrg", "Bartweiss", "Domenic_S", "yarrel", "feintruled", "r3bl", "phigcch" ]
}

('Status Code', 200)

('Status Code', 200)
```

7. Copy the code below, indent and paste it on line 19 to make a **HEAD** API call:

"req = requests.head('https://hacker-news.firebaseio.com/v0/updates.json?print=pretty')"

8. Delete the **#** on line 30:

```python
1    import requests
2
3    # Item and profile changes in hackernews
4
5    # Requests a resource at the requested URL.
6    def hackernewsgetapirequest():
7        req = requests.get('https://hacker-news.firebaseio.com/v0/updates.json?print=pretty')
8        print (req.text)
9        print ("Status Code", req.status_code)
10
11   # Indicates which techniques are supported.
12   def hackernewsoptionsapirequest():
13       req = requests.options('https://hacker-news.firebaseio.com/v0/updates.json?print=pretty')
14       print (req.text)
15       print ("Status Code", req.status_code)
16
17   # Returns meta information in that given URL.
18   def hackernewsheadapirequest():
19       req = requests.head('')
20       print (req.text)
21       print ("Status Code", req.status_code)
22
23   # Requests a resource at the requested URL.
24   hackernewsgetapirequest()
25
26   # Indicates which techniques are supported.
27   hackernewsoptionsapirequest()
28
29   # Returns meta information in that given URL.
30   #hackernewsheadapirequest()
```

9. Run the Python script to see what meta information is available the **HEAD** of the URL:

```
● ● ●              1. alvinlawson@Alvins-Air: ~/Desktop/MajorLeagueHackingAssignment (zsh)
(venv)  alvinlawson-Air  ~/Desktop/MajorLeagueHackingAssignment  master ●  python hacker
newsstep2.py
{
  "items" : [ 17079723, 17081976, 17080612, 17081819, 17081176, 17082216, 17082217, 17080600, 170822
75, 17082253, 17081295, 17080720, 17080807, 17082273, 17082266, 17082272, 17082274, 17079035, 170785
14, 17076741, 17081153, 17075489, 17081120, 17079197, 17076090, 17080905, 17081684, 17073294, 170773
58, 17080985, 17073327, 17081860, 17080056, 17081238, 17074721, 17078216, 17079952, 17082040, 170762
22 ],
  "profiles" : [ "ramanan", "matt_d", "alkonaut", "kowdermeister", "boyter", "skibz", "emodendroket"
, "lvillani", "tekstar", "malvosenior", "cm2187", "skellertor", "voctor" ]
}

('Status Code', 200)

('Status Code', 200)

('Status Code', 405)
(venv)  alvinlawson-Air  ~/Desktop/MajorLeagueHackingAssignment  master ●
```

How To Run Example:

- **Link:** [Click Me](#)

- **Install:** Python 3.

- **Install:** Firefox or Chrome.

- **Run:** "pip install virtualenv".

- **Run:** "source venv/bin/activate".

- **Run:** "pip install -r requirements.txt".

- **Run:** "python3 hackernewstep2.py".