

Your answer is correct, score saved.



Following Links in Python

In this assignment you will write a Python program that expands on <http://www.py4e.com/code3/urllinks.py>. The program will use **urllib** to read the HTML from the data files below, extract the href= vaues from the anchor tags, scan for a tag that is in a particular position relative to the first name in the list, follow that link and repeat the process a number of times and report the last name you find.

We provide two files for this assignment. One is a sample file where we give you the name for your testing and the other is the actual data you need to process for the assignment

- Sample problem: Start at http://py4e-data.dr-chuck.net/known_by_Fikret.html
Find the link at position **3** (the first name is 1). Follow that link. Repeat this process **4** times. The answer is the last name that you retrieve.
Sequence of names: Fikret Montgomery Mhairade Butchi Anayah
Last name in sequence: Anayah
- Actual problem: Start at: http://py4e-data.dr-chuck.net/known_by_Jazmine.html
Find the link at position **18** (the first name is 1). Follow that link. Repeat this process **7** times. The answer is the last name that you retrieve.
Hint: The first character of the name of the last page that you will load is: M

Strategy

The web pages tweak the height between the links and hide the page after a few seconds to make it difficult for you to do the assignment without writing a Python program. But frankly with a little effort and patience you can overcome these attempts to make it a little harder to complete the assignment without writing a Python program. But that is not the point. The point is to write a clever Python program to solve the program.

Sample execution

Here is a sample execution of a solution:

```
$ python3 solution.py
Enter URL: http://py4e-data.dr-chuck.net/known_by_Fikret.html
Enter count: 4
Enter position: 3
Retrieving: http://py4e-data.dr-chuck.net/known_by_Fikret.html
Retrieving: http://py4e-data.dr-chuck.net/known_by_Montgomery.html
Retrieving: http://py4e-data.dr-chuck.net/known_by_Mhairade.html
Retrieving: http://py4e-data.dr-chuck.net/known_by_Butchi.html
Retrieving: http://py4e-data.dr-chuck.net/known_by_Anayah.html
```

The answer to the assignment for this execution is "Anayah".

Turning in the Assignment

Enter the last name retrieved and your Python code below:

Name: (name starts with M)

Python code:

```
while count != meter :

    print('TAG:', tags[position])
    print('URL:', tags[position].get('href', None))
    print('Contents:', tags[position].contents[0])
    print('Attrs:', tags[position].attrs)
    meter = meter + 1

    ctx = ssl.create_default_context()
    ctx.check_hostname = False
    ctx.verify_mode = ssl.CERT_NONE

    url = tags[position].get('href', None)
    print(url)
    html = urlopen(url, context=ctx).read()
    soup = BeautifulSoup(html, "html.parser")
    tags = soup('a')
    print('break', meter, count)
```