

# web scraping

In [1]: 1 !pip install requests beautifulsoup4

```
Requirement already satisfied: requests in c:\users\nihar\anaconda3\lib\site-packages (2.28.1)
Requirement already satisfied: beautifulsoup4 in c:\users\nihar\anaconda3\lib\site-packages (4.11.1)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\nihar\anaconda3\lib\site-packages (from requests) (2.0.4)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\nihar\anaconda3\lib\site-packages (from requests) (2022.9.14)
Requirement already satisfied: idna<4,>=2.5 in c:\users\nihar\anaconda3\lib\site-packages (from requests) (3.3)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\nihar\anaconda3\lib\site-packages (from requests) (1.26.11)
Requirement already satisfied: soupsieve>1.2 in c:\users\nihar\anaconda3\lib\site-packages (from beautifulsoup4) (2.3.1)
```

```
In [5]: 1 import requests
2 from bs4 import BeautifulSoup
3 url = "http://quotes.toscrape.com/"
4 response = requests.get(url)
5 if response.status_code == 200:
6     soup = BeautifulSoup(response.text, 'html.parser')
7     quotes = soup.find_all("div", class_="quote")
8     for i, quote in enumerate(quotes[:5]):
9         text = quote.find("span", class_="text").text
10        author = quote.find("small", class_="author").text
11        tags = [tag.text for tag in quote.find_all("a", class_="tag")]
12        print(f"{i+1}. \"{text}\" - {author}")
13        print(f"Tags: {' '.join(tags)} \n")
14    else:
15        print(f"Failed to retrieve the webpage.statuscode:{response.status_code}")
16
```

1. ""The world as we have created it is a process of our thinking. It cannot be changed without changing our thinking."" - Albert Einstein  
Tags:change,deep-thoughts,thinking,world

2. ""It is our choices, Harry, that show what we truly are, far more than our abilities."" - J.K. Rowling  
Tags:abilities,choices

3. ""There are only two ways to live your life. One is as though nothing is a miracle. The other is as though everything is a miracle."" - Albert Einstein  
Tags:inspirational,life,live,miracle,miracles

4. ""The person, be it gentleman or lady, who has not pleasure in a good novel, must be intolerably stupid."" - Jane Austen  
Tags:aliteracy,books,classic,humor

5. ""Imperfection is beauty, madness is genius and it's better to be absolutely ridiculous than absolutely boring."" - Marilyn Monroe  
Tags:be-yourself,inspirational

Failed to retrieve the webpage.statuscode:200

```
In [10]: 1 import requests
2 from bs4 import BeautifulSoup
3 city = "india/hyderabad"
4 url = f"https://www.timeanddate.com/weather/{city}"
5 response = requests.get(url)
6 soup = BeautifulSoup(response.text, 'html.parser')
7 temp = soup.find("div", class_="h2").text.strip() if soup.find("div", class_="h2") else "N/A"
8 desc = soup.find("p").text.strip() if soup.find("p") else "N/A"
9 print(f"Current Weather in Hyderabad:{temp}|{desc}")
```

Current Weather in Hyderabad:28 °C|Haze.

```
In [11]: 1 import requests
2
3 from bs4 import BeautifulSoup
4
5
6
7 # Product search URL (Example: iPhone)
8
9 search_url = "https://www.amazon.in/s?k=iphone&crid=PQVCJSNISAH4&sprefi
10
11
12
13 # Headers (Mimic a browser)
14
15 headers = {
16     "User-Agent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit
17
18 }
19
20 # Send GET request
21
22 response = requests.get(search_url, headers=headers)
23
24 soup = BeautifulSoup(response.text, "html.parser")
25
26
27
28 # Extract first product name & price
29
30 product = soup.select_one("span.a-size-medium")
31
32 price = soup.select_one("span.a-price-whole")
33
34
35
36 # Display product details
37
38 if product and price:
39     print(f"Product: {product.text.strip()}")
40     print(f"Price: ${price.text.strip()}")
41
42 else:
43
44     print("Could not find product details.")
45
46
```

Could not find product details.

```
In [12]: 1 import requests
2
3 from bs4 import BeautifulSoup
4
5
6
7 # Wikipedia page URL
8
9 url = "https://en.wikipedia.org/wiki/List_of_countries_and_dependencies"
10
11
12
13 # Send GET request
14
15 response = requests.get(url, headers=headers)
16
17 soup = BeautifulSoup(response.text, "html.parser")
18
19
20
21 # Find the table
22
23 table = soup.find("table", class_="wikitable")
24
25 # Extract the first 5 countries and their population
26
27 for row in table.find_all("tr")[1:6]: # Skip the header row
28
29     columns = row.find_all("td")
30
31     country = columns[1].text.strip()
32
33     population = columns[2].text.strip()
34
35
36
37     print(f"{country}: {population}")
```

World: 8,119,000,000  
China: 1,408,280,000  
1,402,737,000: 17.2%  
United States: 340,110,988  
Indonesia: 282,477,584

```
In [17]: 1 from IPython.display import display, HTML
```

```
In [18]: 1 display(HTML("""<table>
2
3     <tr>
4
5         <th>Company</th>
6
7         <th>Contact</th>
8
9         <th>Country</th>
10
11     </tr>
12
13     <tr>
14
15         <td>Alfreds Futterkiste</td>
16
17         <td>Maria Anders</td>
18
19         <td>Germany</td>
20
21     </tr>
22
23     <tr>
24
25         <td>Centro comercial Moctezuma</td>
26
27         <td>Francisco Chang</td>
28
29         <td>Mexico</td>
30
31     </tr>
32
33 </table>
34
35 """))
```

Company	Contact	Country
Alfreds Futterkiste	Maria Anders	Germany
Centro comercial Moctezuma	Francisco Chang	Mexico

```
In [ ]: 1
```