1) Write a python program to display all the header tags from wikipedia.org and make data frame.

In [1]:
```python
## importing important libraries
from bs4 import BeautifulSoup
import requests
```

In [2]:
```python
## Send get request to the webpage server to get the source code of the page
page = requests.get('https://en.wikipedia.org/wiki/Main_Page')
page
```

Out[2]: <Response [200]>

In [3]:
```python
#Selecting required Page content
soup1 = BeautifulSoup(page.content)
```

In [4]:
```python
#printing all header tags
heading_tags = ["h1", "h2", "h3"]

for tags in soup1.find_all(heading_tags):
    print(tags.name + ' -> ' + tags.text.strip())
```

```
h1 -> Main Page
h1 -> Welcome to Wikipedia
h2 -> From today's featured article
h2 -> Did you know ...
h2 -> In the news
h2 -> On this day
h2 -> Today's featured picture
h2 -> Other areas of Wikipedia
h2 -> Wikipedia's sister projects
h2 -> Wikipedia languages
```

2) Write s python program to display list of respected former presidents of India(i.e. Name , Term ofoffice) from https://presidentofindia.nic.in/former-presidents.htm and make data frame.

In [5]:
```python
## Send get request to the webpage server to get the source code of the page

page2 = requests.get('https://presidentofindia.nic.in/former-presidents.htm')
page2
```

Out[5]: <Response [200]>

In [6]:
```python
#Seleecting required Page content

soup2 = BeautifulSoup(page2.content).find_all('div',class_='presidentListing')
```

In [7]:
```python
# scraping the list of president names and there term_of_office using for loop
import pandas as pd
data = []
for div in soup2:
    Name = div.find("h3").getText()
    Term_of_Office = div.find("p").text.strip("Term of Office:") ## after extraction, striping off text Term of
    data.append([Name,Term_of_Office])

President = pd.DataFrame(data, columns=["Name", "Term_of_Office"]) ## creating a dataframe and displaying the t

President
```

Out[7]:

	Name	Term_of_Office
0	Shri Ram Nath Kovind (birth - 1945)	25 July, 2017 to 25 July, 2022
1	Shri Pranab Mukherjee (1935-2020)	25 July, 2012 to 25 July, 2017
2	Smt Pratibha Devisingh Patil (birth - 1934)	25 July, 2007 to 25 July, 2012
3	DR. A.P.J. Abdul Kalam (1931-2015)	25 July, 2002 to 25 July, 2007
4	Shri K. R. Narayanan (1920 - 2005)	25 July, 1997 to 25 July, 2002
5	Dr Shankar Dayal Sharma (1918-1999)	25 July, 1992 to 25 July, 1997
6	Shri R Venkataraman (1910-2009)	25 July, 1987 to 25 July, 1992
7	Giani Zail Singh (1916-1994)	25 July, 1982 to 25 July, 1987
8	Shri Neelam Sanjiva Reddy (1913-1996)	25 July, 1977 to 25 July, 1982
9	Dr. Fakhruddin Ali Ahmed (1905-1977)	24 August, 1974 to 11 February, 1977
10	Shri Varahagiri Venkata Giri (1894-1980)	3 May, 1969 to 20 July, 1969 and 24 August, 19...
11	Dr. Zakir Husain (1897-1969)	13 May, 1967 to 3 May, 1969
12	Dr. Sarvepalli Radhakrishnan (1888-1975)	13 May, 1962 to 13 May, 1967
13	Dr. Rajendra Prasad (1884-1963)	26 January, 1950 to 13 May, 1962

3) Write a python program to scrape cricket rankings from icc-cricket.com. You have to scrape and make data frame-

a) Top 10 ODI teams in men's cricket along with the records for matches, points and rating.

b) Top 10 ODI Batsmen along with the records of their team andrating

c) Top 10 ODI Bowlers along with the records of their team andrating

```
In [8]:   ## Send get request to the webpage server to get the source code of the page for Men's cricket team ranking

          page3a = requests.get('https://www.icc-cricket.com/rankings/mens/team-rankings/odi')
          page3a
```

```
Out[8]:   <Response [200]>
```

```
In [9]:   ## Extracting the required page content.

          soup3a = BeautifulSoup(page3a.content).find('table')
          soup3a
```

```
Out[9]:   <table class="table">
          <thead>
          <tr class="table-head">
          <th class="table-head__cell u-text-right">Pos</th>
          <th class="table-head__cell rankings-table__team">
          <span class="u-hide-mobile">Team</span>
          <span class="u-show-mobile">T</span>
          </th>
          <th class="table-head__cell u-center-text">
          <span class="u-hide-mobile">Matches</span>
          <span class="u-show-mobile">M</span>
          </th>
          <th class="table-head__cell u-center-text">
          <span class="u-hide-mobile">Points</span>
          <span class="u-show-mobile">P</span>
          </th>
          <th class="table-head__cell u-text-right rating">
          <span class="u-hide-mobile">Rating</span>
          <span class="u-show-mobile">R</span>
          </th>
          </tr>
          </thead>
          <tbody>
          <tr class="rankings-block__banner">
          <td class="rankings-block__banner--pos">1</td>
          <td class="rankings-block__banner--team-name">
          <span class="flag-30 rankings-block__banner--flag AUS"></span>
          <span class="u-hide-phablet">Australia</span>
          <span class="u-show-phablet">AUS</span>
          </td>
          <td class="rankings-block__banner--matches">23</td>
          <td class="rankings-block__banner--points">2,714</td>
          <td class="rankings-block__banner--rating u-text-right">
                              118
                              <span class="circle-branding circle-branding--top"></span>
          <span class="circle-branding circle-branding--bottom"></span>
          </td>
          </tr>
          <tr class="table-body" data-team-id="20">
          <td class="table-body__cell table-body__cell--position u-text-right">2</td>
          <td class="table-body__cell rankings-table__team">
          <span class="flag-15 table-body_logo PAK"></span>
          <span class="u-hide-phablet">Pakistan</span>
          <span class="u-show-phablet">PAK</span>
          </td>
          <td class="table-body__cell u-center-text">20</td>
          <td class="table-body__cell u-center-text">2,316</td>
          <td class="table-body__cell u-text-right rating">116</td>
          </tr>
          <tr class="table-body" data-team-id="14">
          <td class="table-body__cell table-body__cell--position u-text-right">3</td>
          <td class="table-body__cell rankings-table__team">
          <span class="flag-15 table-body_logo IND"></span>
          <span class="u-hide-phablet">India</span>
          <span class="u-show-phablet">IND</span>
          </td>
          <td class="table-body__cell u-center-text">33</td>
          <td class="table-body__cell u-center-text">3,807</td>
          <td class="table-body__cell u-text-right rating">115</td>
          </tr>
          <tr class="table-body" data-team-id="16">
          <td class="table-body__cell table-body__cell--position u-text-right">4</td>
          <td class="table-body__cell rankings-table__team">
          <span class="flag-15 table-body_logo NZ"></span>
          <span class="u-hide-phablet">New Zealand</span>
          <span class="u-show-phablet">NZ</span>
          </td>
          <td class="table-body__cell u-center-text">27</td>
          <td class="table-body__cell u-center-text">2,806</td>
          <td class="table-body__cell u-text-right rating">104</td>
          </tr>
          <tr class="table-body" data-team-id="11">
          <td class="table-body__cell table-body__cell--position u-text-right">5</td>
          <td class="table-body__cell rankings-table__team">
          <span class="flag-15 table-body_logo ENG"></span>
          <span class="u-hide-phablet">England</span>
          <span class="u-show-phablet">ENG</span>
          </td>
          <td class="table-body__cell u-center-text">24</td>
```

```
<td class="table-body__cell u-center-text">2,426</td>
<td class="table-body__cell u-text-right rating">101</td>
</tr>
<tr class="table-body" data-team-id="19">
<td class="table-body__cell table-body__cell--position u-text-right">6</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo SA"></span>
<span class="u-hide-phablet">South Africa</span>
<span class="u-show-phablet">SA</span>
</td>
<td class="table-body__cell u-center-text">19</td>
<td class="table-body__cell u-center-text">1,910</td>
<td class="table-body__cell u-text-right rating">101</td>
</tr>
<tr class="table-body" data-team-id="22">
<td class="table-body__cell table-body__cell--position u-text-right">7</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo BAN"></span>
<span class="u-hide-phablet">Bangladesh</span>
<span class="u-show-phablet">BAN</span>
</td>
<td class="table-body__cell u-center-text">25</td>
<td class="table-body__cell u-center-text">2,451</td>
<td class="table-body__cell u-text-right rating">98</td>
</tr>
<tr class="table-body" data-team-id="17">
<td class="table-body__cell table-body__cell--position u-text-right">8</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo AFG"></span>
<span class="u-hide-phablet">Afghanistan</span>
<span class="u-show-phablet">AFG</span>
</td>
<td class="table-body__cell u-center-text">10</td>
<td class="table-body__cell u-center-text">878</td>
<td class="table-body__cell u-text-right rating">88</td>
</tr>
<tr class="table-body" data-team-id="13">
<td class="table-body__cell table-body__cell--position u-text-right">9</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo SL"></span>
<span class="u-hide-phablet">Sri Lanka</span>
<span class="u-show-phablet">SL</span>
</td>
<td class="table-body__cell u-center-text">21</td>
<td class="table-body__cell u-center-text">1,682</td>
<td class="table-body__cell u-text-right rating">80</td>
</tr>
<tr class="table-body" data-team-id="21">
<td class="table-body__cell table-body__cell--position u-text-right">10</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo WI"></span>
<span class="u-hide-phablet">West Indies</span>
<span class="u-show-phablet">WI</span>
</td>
<td class="table-body__cell u-center-text">25</td>
<td class="table-body__cell u-center-text">1,797</td>
<td class="table-body__cell u-text-right rating">72</td>
</tr>
<tr class="table-body" data-team-id="18">
<td class="table-body__cell table-body__cell--position u-text-right">11</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo ZIM"></span>
<span class="u-hide-phablet">Zimbabwe</span>
<span class="u-show-phablet">ZIM</span>
</td>
<td class="table-body__cell u-center-text">23</td>
<td class="table-body__cell u-center-text">1,163</td>
<td class="table-body__cell u-text-right rating">51</td>
</tr>
<tr class="table-body" data-team-id="12">
<td class="table-body__cell table-body__cell--position u-text-right">12</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo IRE"></span>
<span class="u-hide-phablet">Ireland</span>
<span class="u-show-phablet">IRE</span>
</td>
<td class="table-body__cell u-center-text">18</td>
<td class="table-body__cell u-center-text">826</td>
<td class="table-body__cell u-text-right rating">46</td>
</tr>
<tr class="table-body" data-team-id="69">
<td class="table-body__cell table-body__cell--position u-text-right">13</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo SCO"></span>
<span class="u-hide-phablet">Scotland</span>
<span class="u-show-phablet">SCO</span>
</td>
<td class="table-body__cell u-center-text">26</td>
<td class="table-body__cell u-center-text">1,184</td>
<td class="table-body__cell u-text-right rating">46</td>
</tr>
<tr class="table-body" data-team-id="125">
<td class="table-body__cell table-body__cell--position u-text-right">14</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo NEP"></span>
<span class="u-hide-phablet">Nepal</span>
<span class="u-show-phablet">NEP</span>
</td>
<td class="table-body__cell u-center-text">34</td>
<td class="table-body__cell u-center-text">1,254</td>
<td class="table-body__cell u-text-right rating">37</td>
</tr>
<tr class="table-body" data-team-id="157">
<td class="table-body__cell table-body__cell--position u-text-right">15</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo USA"></span>
<span class="u-hide-phablet">United States</span>
<span class="u-show-phablet">USA</span>
</td>
<td class="table-body__cell u-center-text">25</td>
<td class="table-body__cell u-center-text">865</td>
<td class="table-body__cell u-text-right rating">35</td>
</tr>
<tr class="table-body" data-team-id="124">
<td class="table-body__cell table-body__cell--position u-text-right">16</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo NAM"></span>
```

```
<span class="u-hide-phablet">Namibia</span>
<span class="u-show-phablet">NAM</span>
</td>
<td class="table-body__cell u-center-text">28</td>
<td class="table-body__cell u-center-text">813</td>
<td class="table-body__cell u-text-right rating">29</td>
</tr>
<tr class="table-body" data-team-id="68">
<td class="table-body__cell table-body__cell--position u-text-right">17</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo NED"></span>
<span class="u-hide-phablet">Netherlands</span>
<span class="u-show-phablet">NED</span>
</td>
<td class="table-body__cell u-center-text">20</td>
<td class="table-body__cell u-center-text">525</td>
<td class="table-body__cell u-text-right rating">26</td>
</tr>
<tr class="table-body" data-team-id="128">
<td class="table-body__cell table-body__cell--position u-text-right">18</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo OMA"></span>
<span class="u-hide-phablet">Oman</span>
<span class="u-show-phablet">OMA</span>
</td>
<td class="table-body__cell u-center-text">17</td>
<td class="table-body__cell u-center-text">344</td>
<td class="table-body__cell u-text-right rating">20</td>
</tr>
<tr class="table-body" data-team-id="155">
<td class="table-body__cell table-body__cell--position u-text-right">19</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo UAE"></span>
<span class="u-hide-phablet">UAE</span>
<span class="u-show-phablet">UAE</span>
</td>
<td class="table-body__cell u-center-text">32</td>
<td class="table-body__cell u-center-text">565</td>
<td class="table-body__cell u-text-right rating">18</td>
</tr>
<tr class="table-body" data-team-id="133">
<td class="table-body__cell table-body__cell--position u-text-right">20</td>
<td class="table-body__cell rankings-table__team">
<span class="flag-15 table-body_logo PNG"></span>
<span class="u-hide-phablet">Papua New Guinea</span>
<span class="u-show-phablet">PNG</span>
</td>
<td class="table-body__cell u-center-text">28</td>
<td class="table-body__cell u-center-text">106</td>
<td class="table-body__cell u-text-right rating">4</td>
</tr>
</tbody>
</table>
```

In [10]:
```python
## extracting row_headers from table.

row_headers =[]
for x in soup3a.find_all('th'):
    for y in x.find_all('span',{'class':"u-hide-mobile"}):
        row_headers.append(y.text)

row_headers
row_headers.insert(0,soup3a.find('th',{'class':'table-head__cell u-text-right'}).text)
row_headers
```

Out[10]: `['Pos', 'Team', 'Matches', 'Points', 'Rating']`

In [11]:
```python
# extracting position, team name , no of matches, points and ranking
table_values=[]
for x in soup3a.find_all('tr')[1:11]:
    td_team_name = x.find_all('td')
    td_val = [y.text.strip() for y in td_team_name]

    table_values.append(td_val)

table_values
```

Out[11]:
```
[['1', 'Australia\nAUS', '23', '2,714', '118'],
 ['2', 'Pakistan\nPAK', '20', '2,316', '116'],
 ['3', 'India\nIND', '33', '3,807', '115'],
 ['4', 'New Zealand\nNZ', '27', '2,806', '104'],
 ['5', 'England\nENG', '24', '2,426', '101'],
 ['6', 'South Africa\nSA', '19', '1,910', '101'],
 ['7', 'Bangladesh\nBAN', '25', '2,451', '98'],
 ['8', 'Afghanistan\nAFG', '10', '878', '88'],
 ['9', 'Sri Lanka\nSL', '21', '1,682', '80'],
 ['10', 'West Indies\nWI', '25', '1,797', '72']]
```

In [12]:
```python
## diplsying teh list in dataframe
pd.DataFrame(table_values,columns=row_headers)
```

Out[12]:

	Pos	Team	Matches	Points	Rating
0	1	Australia\nAUS	23	2,714	118
1	2	Pakistan\nPAK	20	2,316	116
2	3	India\nIND	33	3,807	115
3	4	New Zealand\nNZ	27	2,806	104
4	5	England\nENG	24	2,426	101
5	6	South Africa\nSA	19	1,910	101
6	7	Bangladesh\nBAN	25	2,451	98
7	8	Afghanistan\nAFG	10	878	88
8	9	Sri Lanka\nSL	21	1,682	80
9	10	West Indies\nWI	25	1,797	72

b) Top 10 ODI Batsmen along with the records of their team andrating

In [13]:
```python
## Send get request to the webpage server to get the source code of the page for Men's ODI cricket ranking

page3b = requests.get('https://www.icc-cricket.com/rankings/mens/player-rankings/odi')
page3b
```

Out[13]: `<Response [200]>`

In [14]:
```python
## extracting the table with batting ranking
soup3b = BeautifulSoup(page3b.content).find('div',{'data-cricket-role':"batting"})
```

In [15]:
```python
## extracting the row headings for the dataframe
row_headers =[]
for x in soup3b.find_all('thead'):
    for y in x.find_all('th',{'class':"table-head__cell"}):
        row_headers.append(y.text.strip())

row_headers
```

Out[15]: `['Pos', 'Player', 'Team', 'Rating']`

In [16]:
```python
## For the 1st ranked player, not included in table , extracting the details separately

first_data_batsman=soup3b.find("div",class_="rankings-block__top-player").get_text(strip=True,separator = " ").
first_data_batsman
```

Out[16]: `['1', '(0)', 'Babar', 'Azam', 'PAK', '886']`

In [17]:
```python
## Merging the list indexes according to row heder values.
first_data_batsman[0:2]= [''.join(first_data_batsman[0:2])]
first_data_batsman
```

Out[17]: `['1(0)', 'Babar', 'Azam', 'PAK', '886']`

In [18]:
```python
first_data_batsman[1:3]= [''.join(first_data_batsman[1:3])]
first_data_batsman
```

Out[18]: `['1(0)', 'BabarAzam', 'PAK', '886']`

In [19]:
```python
### final length of data required is 4
len(first_data_batsman)
```

Out[19]: `4`

In [20]:
```python
## Extracting the rest 9 player values from the table
table_values=[]
for x in soup3b.find_all('tr')[0:10]:
    td_team_name = x.find_all('td')
    td_val = [y.text.strip('\n').replace('\n','') for y in td_team_name]
    table_values.append(td_val)

table_values
```

Out[20]:
```
[[],
 ['                              2                    (0)',
  'Rassie van der Dussen',
  'SA',
  '777'],
 ['                              3                    (0)',
  'Fakhar Zaman',
  'PAK',
  '755'],
 ['                              4                    (0)',
  'Imam-ul-Haq',
  'PAK',
  '745'],
 ['                              5                    (0)',
  'Shubman Gill',
  'IND',
  '738'],
 ['                              6                    (0)',
  'David Warner',
  'AUS',
  '726'],
 ['                              7                    (2)This player has moved up in the rank
ings since the previous rankings update',
  'Harry Tector',
  'IRE',
  '722'],
 ['                              8                    (1)This player has moved down in the ra
nkings since the previous rankings update',
  'Virat Kohli',
  'IND',
  '719'],
 ['                              9                    (1)This player has moved down in the ra
nkings since the previous rankings update',
  'Quinton de Kock',
  'SA',
  '718'],
 ['                              10                   (0)',
  'Rohit Sharma',
  'IND',
  '707']]
```

In [21]:
```python
### putting the scrapped details together in one dataframe
top_10_batsman = pd.DataFrame(table_values,columns=row_headers)
top_10_batsman.loc[0]=first_data_batsman

top_10_batsman
```

Out[21]:

	Pos	Player	Team	Rating
0	1(0)	BabarAzam	PAK	886
1	2 ...	Rassie van der Dussen	SA	777
2	3 ...	Fakhar Zaman	PAK	755
3	4 ...	Imam-ul-Haq	PAK	745
4	5 ...	Shubman Gill	IND	738
5	6 ...	David Warner	AUS	726
6	7 ...	Harry Tector	IRE	722
7	8 ...	Virat Kohli	IND	719
8	9 ...	Quinton de Kock	SA	718
9	10 ...	Rohit Sharma	IND	707

c) Top 10 ODI Bowlers along with the records of their team andrating

In [22]:
```python
## Send get request to the webpage server to get the source code of the page for Men's ODI cricket ranking

page3b = requests.get('https://www.icc-cricket.com/rankings/mens/player-rankings/odi')
page3b
```

Out[22]: `<Response [200]>`

In [23]:
```python
## extracting the table with bowling ranking

soup3c = BeautifulSoup(page3b.content).find('div',{'data-cricket-role':"bowling"})
```

In [24]:
```python
## extracting the row headings for the dataframe

row_headers =[]
for x in soup3b.find_all('thead'):
    for y in x.find_all('th',{'class':"table-head__cell"}):
        row_headers.append(y.text.strip())

row_headers
```

Out[24]: `['Pos', 'Player', 'Team', 'Rating']`

In [25]:
```python
## For the 1st ranked player, not included in table , extracting the details separately

first_data_bowler=soup3c.find("div",class_="rankings-block__top-player").get_text(strip=True,separator = " ").s
first_data_bowler
```

Out[25]: `['1', '(0)', 'Josh', 'Hazlewood', 'AUS', '705']`

In [26]:
```python
## Merging the list indexes according to row heder values.

first_data_bowler[0:2] = [''.join(first_data_bowler[0:2])]
first_data_bowler
```

Out[26]: `['1(0)', 'Josh', 'Hazlewood', 'AUS', '705']`

In [27]:
```python
first_data_bowler[1:3] = [''.join(first_data_bowler[1:3])]
first_data_bowler
```

Out[27]: `['1(0)', 'JoshHazlewood', 'AUS', '705']`

In [28]:
```python
## Extracting the rest 9 player values from the table

table_values=[]
for x in soup3c.find_all('tr')[0:10]:
    td_team_name = x.find_all('td')
    td_val = [y.text.strip('\n').replace('\n','') for y in td_team_name]
    table_values.append(td_val)

table_values
```

```
Out[28]:  [[],
          ['                                  2                            (0)',
           'Mohammed Siraj',
           'IND',
           '691'],
          ['                                  3                            (0)',
           'Mitchell Starc',
           'AUS',
           '686'],
          ['                                  4                            (0)',
           'Matt Henry',
           'NZ',
           '667'],
          ['                                  5                            (0)',
           'Trent Boult',
           'NZ',
           '660'],
          ['                                  6                            (0)',
           'Rashid Khan',
           'AFG',
           '659'],
          ['                                  7                            (0)',
           'Adam Zampa',
           'AUS',
           '652'],
          ['                                  8                            (0)',
           'Mujeeb Ur Rahman',
           'AFG',
           '637'],
          ['                                  9                            (0)',
           'Mohammad Nabi',
           'AFG',
           '631'],
          ['                                  10                           (0)',
           'Shaheen Afridi',
           'PAK',
           '630']]
```

```
In [29]:  ### putting the scrapped details together in one dataframe

          top_10_bowlers = pd.DataFrame(table_values,columns=row_headers)
          top_10_bowlers.loc[0]=first_data_bowler

          top_10_bowlers
```

Out[29]:

	Pos	Player	Team	Rating
0	1(0)	JoshHazlewood	AUS	705
1	2 ...	Mohammed Siraj	IND	691
2	3 ...	Mitchell Starc	AUS	686
3	4 ...	Matt Henry	NZ	667
4	5 ...	Trent Boult	NZ	660
5	6 ...	Rashid Khan	AFG	659
6	7 ...	Adam Zampa	AUS	652
7	8 ...	Mujeeb Ur Rahman	AFG	637
8	9 ...	Mohammad Nabi	AFG	631
9	10 ...	Shaheen Afridi	PAK	630

4) Write a python program to scrape cricket rankings from icc-cricket.com. You have to scrape and make data frame-

a) Top 10 ODI teams in women's cricket along with the records for matches, points and rating.

b) Top 10 women's ODI Batting players along with the records of their team and rating.

c) Top 10 women's ODI all-rounder along with the records of their team and rating.

a) Top 10 ODI teams in women's cricket along with the records for matches, points and rating.

```
In [30]:  ### Send get request to the webpage server to get the source code of the page for Women's ODI team cricket rank

          page4a = requests.get('https://www.icc-cricket.com/rankings/womens/team-rankings/odi')
          page4a
```

Out[30]: <Response [200]>

```
In [31]:  ## ## Extracting the required page content.

          soup4a = BeautifulSoup(page4a.content).find('table',{'class':"table"})
```

```
In [32]:  row_headers =[]

          for x in soup4a.find_all('th'):
              for y in x.find_all('span',{'class':"u-hide-mobile"}):
                  row_headers.append(y.text)

          row_headers.insert(0,soup4a.find('th',{'class':'table-head__cell u-text-right'}).text)
          row_headers
```

Out[32]: ['Pos', 'Team', 'Matches', 'Points', 'Rating']

In [33]:
```python
table_values=[]
for x in soup4a.find_all('tr')[1:11]:
    td_team_name = x.find_all('td')
    td_val = [y.text.strip() for y in td_team_name]
    table_values.append(td_val)

table_values
```

Out[33]:
```
[['1', 'Australia\nAUS', '21', '3,603', '172'],
 ['2', 'England\nENG', '28', '3,342', '119'],
 ['3', 'South Africa\nSA', '26', '3,098', '119'],
 ['4', 'India\nIND', '27', '2,820', '104'],
 ['5', 'New Zealand\nNZ', '25', '2,553', '102'],
 ['6', 'West Indies\nWI', '27', '2,535', '94'],
 ['7', 'Thailand\nTHA', '11', '821', '75'],
 ['8', 'Bangladesh\nBAN', '14', '977', '70'],
 ['9', 'Pakistan\nPAK', '27', '1,678', '62'],
 ['10', 'Sri Lanka\nSL', '9', '479', '53']]
```

In [34]:
```python
### putting the scrapped details together in one dataframe

pd.DataFrame(table_values,columns=row_headers)
```

Out[34]:

	Pos	Team	Matches	Points	Rating
0	1	Australia\nAUS	21	3,603	172
1	2	England\nENG	28	3,342	119
2	3	South Africa\nSA	26	3,098	119
3	4	India\nIND	27	2,820	104
4	5	New Zealand\nNZ	25	2,553	102
5	6	West Indies\nWI	27	2,535	94
6	7	Thailand\nTHA	11	821	75
7	8	Bangladesh\nBAN	14	977	70
8	9	Pakistan\nPAK	27	1,678	62
9	10	Sri Lanka\nSL	9	479	53

b) Top 10 women's ODI Batting players along with the records of their team and rating.

In [35]:
```python
page4b = requests.get('https://www.icc-cricket.com/rankings/womens/player-rankings/odi')
page4b
```

Out[35]: <Response [200]>

In [36]:
```python
soup4b = BeautifulSoup(page4b.content).find('div',attrs={'data-cricket-role':"batting"})
soup4b
```

Out[36]:
```html
<div class="rankings-block__container" data-cricket-role="batting" data-cricket-scope="wodi" data-link-to="https://www.icc-cricket.com/rankings/womens/player-rankings/odi/batting" data-page-size="10" data-player-rankings-card="" data-title="ODI Batting Rankings">
<div class="rankings-block__banner">
<div class="rankings-block__title-container">
<div class="rankings-block__type t-wodi">wodi</div>
<h4>ODI Batting Rankings</h4>
<div class="share share-- share--vertical share--small" data-widget="share">
<div class="share__container">
<div class="share__btn js-share-btn">
<svg class="icon"><use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-share" xmlns:xlink="http://www.w3.org/1999/xlink"></use></svg>
<div class="share__title">Share</div>
</div>
<ul class="share__list">
<li class="share__item share__item--facebook js-social-option" data-share-url="https://www.icc-cricket.comhttps://www.icc-cricket.com/rankings/womens/player-rankings/odi/batting" data-social-service="facebook" role="button" tabindex="0">
<svg class="icon"><use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-facebook" xmlns:xlink="http://www.w3.org/1999/xlink"></use></svg>
</li>
<li class="share__item share__item--twitter js-social-option" data-share-url="https://www.icc-cricket.comhttps://www.icc-cricket.com/rankings/womens/player-rankings/odi/batting" data-social-service="twitter" role="button" tabindex="0">
<svg class="icon"><use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-twitter" xmlns:xlink="http://www.w3.org/1999/xlink"></use></svg>
</li>
<li class="share__item share__item--messenger u-show-tablet js-social-option" data-share-url="https://www.icc-cricket.comhttps://www.icc-cricket.com/rankings/womens/player-rankings/odi/batting" data-social-service="facebookMessenger" role="buttn" tabindex="0">
<svg class="icon"><use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-facebook-messenger" xmlns:xlink="http://www.w3.org/1999/xlink"></use></svg>
</li>
<li class="share__item share__item--whatsapp u-show-tablet js-social-option" data-share-url="https://www.icc-cricket.comhttps://www.icc-cricket.com/rankings/womens/player-rankings/odi/batting" data-social-service="whatsapp" role="button" tabindex="0">
<svg class="icon"><use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-whatsapp" xmlns:xlink="http://www.w3.org/1999/xlink"></use></svg>
</li>
<li class="share__item share__item--url u-hide-tablet js-copy-button" data-share-url="https://www.icc-cricket.comhttps://www.icc-cricket.com/rankings/womens/player-rankings/odi/batting" role="button" tabindex="0">
<svg class="icon"><use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-url" xmlns:xlink="http://www.w3.org/1999/xlink"></use></svg>
<div class="share__copy-message js-copy-message">URL Copied</div>
</li>
</ul>
</div>
</div>
</div>
<a class="rankings-block__banner-link" href="/rankings/womens/player-rankings/1817">
<div class="rankings-block__top-player">
<div class="rankings-block__banner--pos">
<div class="rankings-block__pos-container">
<span class="rankings-block__pos-number">
```

```
                                      1
                                  </span>
<div class="ranking-pos up">
<svg class="icon">
<use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-chevron-up" xmlns:xlink="http://www.w3.org/
1999/xlink"></use>
</svg>
<span class="ranking-pos__change-amount">(1)</span>
<span class="ranking-pos__tooltip">This player has moved up in the rankings since the previous rankings update<
/span>
</div>
</div>
</div>
<div class="rankings-block__banner--player-info">
<div class="rankings-block__banner--name">Beth Mooney</div>
<div class="rankings-block__banner--nationality">
<div class="flag-15 AUS"></div>
<span class="rankings-block__banner--nation"></span>AUS
                          <div class="rankings-block__banner--rating">754</div>
</div>
</div>
<div class="rankings-block__player-image-container">
<img alt="" class="rankings-block__player-image image-missing" data-error="true" data-player="1817" data-size="
130x150" data-widget="player-image" src="//resources.pulse.icc-cricket.com/players/130x150/Photo-Missing.png"/>
</div>
</div>
</a>
<span class="circle-branding circle-branding--top"></span>
<span class="circle-branding circle-branding--bottom"></span>
</div>
<table class="table rankings-card-table">
<thead>
<tr class="table-head">
<th class="table-head__cell u-text-center">Pos</th>
<th class="table-head__cell">Player</th>
<th class="table-head__cell">Team</th>
<th class="table-head__cell u-text-right">Rating</th>
</tr>
</thead>
<tbody>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                      2
                                  </span>
<div class="ranking-pos up">
<svg class="icon">
<use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-chevron-up" xmlns:xlink="http://www.w3.org/
1999/xlink"></use>
</svg>
<span class="ranking-pos__change-amount">(1)</span>
<span class="ranking-pos__tooltip">This player has moved up in the rankings since the previous rankings update<
/span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/3176">Laura Wolvaardt</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo SA"></span>
<span class="table-body__logo-text">SA</span>
</td>
<td class="table-body__cell u-text-right rating">732</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                      3
                                  </span>
<div class="ranking-pos up">
<svg class="icon">
<use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-chevron-up" xmlns:xlink="http://www.w3.org/
1999/xlink"></use>
</svg>
<span class="ranking-pos__change-amount">(1)</span>
<span class="ranking-pos__tooltip">This player has moved up in the rankings since the previous rankings update<
/span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/1800">Natalie Sciver</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo ENG"></span>
<span class="table-body__logo-text">ENG</span>
</td>
<td class="table-body__cell u-text-right rating">731</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                      4
                                  </span>
<div class="ranking-pos up">
<svg class="icon">
<use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-chevron-up" xmlns:xlink="http://www.w3.org/
1999/xlink"></use>
</svg>
<span class="ranking-pos__change-amount">(1)</span>
<span class="ranking-pos__tooltip">This player has moved up in the rankings since the previous rankings update<
/span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/469">Meg Lanning</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo AUS"></span>
<span class="table-body__logo-text">AUS</span>
</td>
<td class="table-body__cell u-text-right rating">717</td>
```

```
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                5
                        </span>
<div class="ranking-pos up">
<svg class="icon">
<use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-chevron-up" xmlns:xlink="http://www.w3.org/
1999/xlink"></use>
</svg>
<span class="ranking-pos__change-amount">(1)</span>
<span class="ranking-pos__tooltip">This player has moved up in the rankings since the previous rankings update<
/span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/559">Harmanpreet Kaur</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo IND"></span>
<span class="table-body__logo-text">IND</span>
</td>
<td class="table-body__cell u-text-right rating">716</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                6
                        </span>
<div class="ranking-pos up">
<svg class="icon">
<use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-chevron-up" xmlns:xlink="http://www.w3.org/
1999/xlink"></use>
</svg>
<span class="ranking-pos__change-amount">(1)</span>
<span class="ranking-pos__tooltip">This player has moved up in the rankings since the previous rankings update<
/span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/1809">Smriti Mandhana</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo IND"></span>
<span class="table-body__logo-text">IND</span>
</td>
<td class="table-body__cell u-text-right rating">714</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                7
                        </span>
<div class="ranking-pos up">
<svg class="icon">
<use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-chevron-up" xmlns:xlink="http://www.w3.org/
1999/xlink"></use>
</svg>
<span class="ranking-pos__change-amount">(1)</span>
<span class="ranking-pos__tooltip">This player has moved up in the rankings since the previous rankings update<
/span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/600">Chamari Athapaththu</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo SL"></span>
<span class="table-body__logo-text">SL</span>
</td>
<td class="table-body__cell u-text-right rating">673</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                8
                        </span>
<div class="ranking-pos up">
<svg class="icon">
<use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-chevron-up" xmlns:xlink="http://www.w3.org/
1999/xlink"></use>
</svg>
<span class="ranking-pos__change-amount">(2)</span>
<span class="ranking-pos__tooltip">This player has moved up in the rankings since the previous rankings update<
/span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/471">Ellyse Perry</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo AUS"></span>
<span class="table-body__logo-text">AUS</span>
</td>
<td class="table-body__cell u-text-right rating">626</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                9
                        </span>
<div class="ranking-pos up">
<svg class="icon">
<use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-chevron-up" xmlns:xlink="http://www.w3.org/
1999/xlink"></use>
</svg>
<span class="ranking-pos__change-amount"></span>
```

```
<span class="ranking-pos__tooltip">This player has moved up in the rankings since the previous rankings update<
/span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/545">Tammy Beaumont</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo ENG"></span>
<span class="table-body__logo-text">ENG</span>
</td>
<td class="table-body__cell u-text-right rating">595</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                        10
            </span>
<div class="ranking-pos up">
<svg class="icon">
<use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-chevron-up" xmlns:xlink="http://www.w3.org/
1999/xlink"></use>
</svg>
<span class="ranking-pos__change-amount"></span>
<span class="ranking-pos__tooltip">This player has moved up in the rankings since the previous rankings update<
/span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/573">Stafanie Taylor</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo WI"></span>
<span class="table-body__logo-text">WI</span>
</td>
<td class="table-body__cell u-text-right rating">588</td>
</tr>
</tbody>
</table>
<div class="btn-wrapper">
<a class="btn" href="https://www.icc-cricket.com/rankings/womens/player-rankings/odi/batting">Full Table</a>
</div>
</div>
```

In [37]:
```python
row_headers =[]
for x in soup4b.find_all('thead'):
    for y in x.find_all('th',{'class':"table-head__cell"}):
        row_headers.append(y.text.strip())

row_headers
```

Out[37]: ['Pos', 'Player', 'Team', 'Rating']

In [38]:
```python
first_batswoman=soup4b.find("div",class_="rankings-block__top-player").get_text(strip=True,separator = " ").spl
first_batswoman
```

Out[38]:
```
['1',
 '(1)',
 'This',
 'player',
 'has',
 'moved',
 'up',
 'in',
 'the',
 'rankings',
 'since',
 'the',
 'previous',
 'rankings',
 'update',
 'Beth',
 'Mooney',
 'AUS',
 '754']
```

In [39]:
```python
first_batswoman[0:15]=[''.join(first_batswoman[0:15])]
first_batswoman
```

Out[39]:
```
['1(1)Thisplayerhasmovedupintherankingssincethepreviousrankingsupdate',
 'Beth',
 'Mooney',
 'AUS',
 '754']
```

In [40]:
```python
first_batswoman[1:3]=[''.join(first_batswoman[1:3])]
first_batswoman
```

Out[40]:
```
['1(1)Thisplayerhasmovedupintherankingssincethepreviousrankingsupdate',
 'BethMooney',
 'AUS',
 '754']
```

In [41]:
```python
table_values=[]
for x in soup4b.find_all('tr')[0:10]:
    td_team_name = x.find_all('td')
    td_val = [y.text.strip('\n').replace('\n','') for y in td_team_name]
    table_values.append(td_val)

table_values
```

```
Out[41]:  [[],
          ['                                2                           (1)This player has moved up in the rank
          ings since the previous rankings update',
           'Laura Wolvaardt',
           'SA',
           '732'],
          ['                                3                           (1)This player has moved up in the rank
          ings since the previous rankings update',
           'Natalie Sciver',
           'ENG',
           '731'],
          ['                                4                           (1)This player has moved up in the rank
          ings since the previous rankings update',
           'Meg Lanning',
           'AUS',
           '717'],
          ['                                5                           (1)This player has moved up in the rank
          ings since the previous rankings update',
           'Harmanpreet Kaur',
           'IND',
           '716'],
          ['                                6                           (1)This player has moved up in the rank
          ings since the previous rankings update',
           'Smriti Mandhana',
           'IND',
           '714'],
          ['                                7                           (1)This player has moved up in the rank
          ings since the previous rankings update',
           'Chamari Athapaththu',
           'SL',
           '673'],
          ['                                8                           (2)This player has moved up in the rank
          ings since the previous rankings update',
           'Ellyse Perry',
           'AUS',
           '626'],
          ['                                9                              This player has moved up in the ranking
          s since the previous rankings update',
           'Tammy Beaumont',
           'ENG',
           '595'],
          ['                                10                             This player has moved up in the rankin
          gs since the previous rankings update',
           'Stafanie Taylor',
           'WI',
           '588']]
```

In [42]:
```python
### putting the scrapped details together in one dataframe

top_10_batswoman = pd.DataFrame(table_values,columns=row_headers)
top_10_batswoman.loc[0]=first_batswoman

top_10_batswoman
```

Out[42]:

	Pos	Player	Team	Rating
0	1(1)Thisplayerhasmovedupintherankingssincethep...	BethMooney	AUS	754
1	2 ...	Laura Wolvaardt	SA	732
2	3 ...	Natalie Sciver	ENG	731
3	4 ...	Meg Lanning	AUS	717
4	5 ...	Harmanpreet Kaur	IND	716
5	6 ...	Smriti Mandhana	IND	714
6	7 ...	Chamari Athapaththu	SL	673
7	8 ...	Ellyse Perry	AUS	626
8	9 ...	Tammy Beaumont	ENG	595
9	10 ...	Stafanie Taylor	WI	588

c) Top 10 women's ODI all-rounder along with the records of their team and rating.

In [43]:
```python
soup4c = BeautifulSoup(page4b.content).find('div',attrs={'data-cricket-role':"all_round"})
soup4c
```

Out[43]:
```
<div class="rankings-block__container" data-cricket-role="all_round" data-cricket-scope="wodi" data-link-to="ht
tps://www.icc-cricket.com/rankings/womens/player-rankings/odi/all-rounder" data-page-size="10" data-player-rank
ings-card="" data-title="ODI All-Rounder Rankings">
<div class="rankings-block__banner">
<div class="rankings-block__title-container">
<div class="rankings-block__type t-wodi">wodi</div>
<h4>ODI All-Rounder Rankings</h4>
<div class="share share-- share--vertical share--small" data-widget="share">
<div class="share__container">
<div class="share__btn js-share-btn">
<svg class="icon"><use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-share" xmlns:xlink="http:
//www.w3.org/1999/xlink"></use></svg>
<div class="share__title">Share</div>
</div>
<ul class="share__list">
<li class="share__item share__item--facebook js-social-option" data-share-url="https://www.icc-cricket.comhttps
://www.icc-cricket.com/rankings/womens/player-rankings/odi/all-rounder" data-social-service="facebook" role="bu
tton" tabindex="0">
<svg class="icon"><use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-facebook" xmlns:xlink="ht
tp://www.w3.org/1999/xlink"></use></svg>
</li>
<li class="share__item share__item--twitter js-social-option" data-share-url="https://www.icc-cricket.comhttps:
//www.icc-cricket.com/rankings/womens/player-rankings/odi/all-rounder" data-social-service="twitter" role="butt
on" tabindex="0">
<svg class="icon"><use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-twitter" xmlns:xlink="htt
p://www.w3.org/1999/xlink"></use></svg>
</li>
<li class="share__item share__item--messenger u-show-tablet js-social-option" data-share-url="https://www.icc-c
ricket.comhttps://www.icc-cricket.com/rankings/womens/player-rankings/odi/all-rounder" data-social-service="fac
ebookMessenger" role="buttn" tabindex="0">
<svg class="icon"><use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-facebook-messenger" xmlns
:xlink="http://www.w3.org/1999/xlink"></use></svg>
</li>
```

```
<li class="share__item share__item--whatsapp u-show-tablet js-social-option" data-share-url="https://www.icc-cr
icket.comhttps://www.icc-cricket.com/rankings/womens/player-rankings/odi/all-rounder" data-social-service="what
sapp" role="button" tabindex="0">
<svg class="icon"><use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-whatsapp" xmlns:xlink="ht
tp://www.w3.org/1999/xlink"></use></svg>
</li>
<li class="share__item share__item--url u-hide-tablet js-copy-button" data-share-url="https://www.icc-cricket.c
omhttps://www.icc-cricket.com/rankings/womens/player-rankings/odi/all-rounder" role="button" tabindex="0">
<svg class="icon"><use xlink:href="/resources/prod/v8.30.0/i/svg-output/icons.svg#icn-url" xmlns:xlink="http://
www.w3.org/1999/xlink"></use></svg>
<div class="share__copy-message js-copy-message">URL Copied</div>
</li>
</ul>
</div>
</div>
</div>
<a class="rankings-block__banner-link" href="/rankings/womens/player-rankings/3126">
<div class="rankings-block__top-player">
<div class="rankings-block__banner--pos">
<div class="rankings-block__pos-container">
<span class="rankings-block__pos-number">
                                    1
                        </span>
<div class="ranking-pos no-change">
<span class="ranking-pos__no-change-line"></span>
<span class="ranking-pos__change-amount">(0)</span>
</div>
</div>
</div>
<div class="rankings-block__banner--player-info">
<div class="rankings-block__banner--name">Hayley Matthews</div>
<div class="rankings-block__banner--nationality">
<div class="flag-15 WI"></div>
<span class="rankings-block__banner--nation"></span>WI
                            <div class="rankings-block__banner--rating">373</div>
</div>
</div>
<div class="rankings-block__player-image-container">
<img alt="" class="rankings-block__player-image image-missing" data-error="true" data-player="3126" data-size="
130x150" data-widget="player-image" src="//resources.pulse.icc-cricket.com/players/130x150/Photo-Missing.png"/>
</div>
</div>
</a>
<span class="circle-branding circle-branding--top"></span>
<span class="circle-branding circle-branding--bottom"></span>
</div>
<table class="table rankings-card-table">
<thead>
<tr class="table-head">
<th class="table-head__cell u-text-center">Pos</th>
<th class="table-head__cell">Player</th>
<th class="table-head__cell">Team</th>
<th class="table-head__cell u-text-right">Rating</th>
</tr>
</thead>
<tbody>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                    2
                        </span>
<div class="ranking-pos no-change">
<span class="ranking-pos__no-change-line"></span>
<span class="ranking-pos__change-amount">(0)</span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/1800">Natalie Sciver</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo ENG"></span>
<span class="table-body__logo-text">ENG</span>
</td>
<td class="table-body__cell u-text-right rating">371</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                    3
                        </span>
<div class="ranking-pos no-change">
<span class="ranking-pos__no-change-line"></span>
<span class="ranking-pos__change-amount">(0)</span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/471">Ellyse Perry</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo AUS"></span>
<span class="table-body__logo-text">AUS</span>
</td>
<td class="table-body__cell u-text-right rating">366</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                    4
                        </span>
<div class="ranking-pos no-change">
<span class="ranking-pos__no-change-line"></span>
<span class="ranking-pos__change-amount">(0)</span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/424">Marizanne Kapp</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo SA"></span>
<span class="table-body__logo-text">SA</span>
</td>
```

```
<td class="table-body__cell u-text-right rating">349</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                    5
                                </span>
<div class="ranking-pos no-change">
<span class="ranking-pos__no-change-line"></span>
<span class="ranking-pos__change-amount">(0)</span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/3756">Amelia Kerr</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo NZ"></span>
<span class="table-body__logo-text">NZ</span>
</td>
<td class="table-body__cell u-text-right rating">336</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                    6
                                </span>
<div class="ranking-pos no-change">
<span class="ranking-pos__no-change-line"></span>
<span class="ranking-pos__change-amount">(0)</span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/3192">Deepti Sharma</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo IND"></span>
<span class="table-body__logo-text">IND</span>
</td>
<td class="table-body__cell u-text-right rating">322</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                    7
                                </span>
<div class="ranking-pos no-change">
<span class="ranking-pos__no-change-line"></span>
<span class="ranking-pos__change-amount">(0)</span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/4128">Ashleigh Gardner</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo AUS"></span>
<span class="table-body__logo-text">AUS</span>
</td>
<td class="table-body__cell u-text-right rating">292</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                    8
                                </span>
<div class="ranking-pos no-change">
<span class="ranking-pos__no-change-line"></span>
<span class="ranking-pos__change-amount">(0)</span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/468">Jess Jonassen</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo AUS"></span>
<span class="table-body__logo-text">AUS</span>
</td>
<td class="table-body__cell u-text-right rating">250</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                    9
                                </span>
<div class="ranking-pos no-change">
<span class="ranking-pos__no-change-line"></span>
<span class="ranking-pos__change-amount">(0)</span>
</div>
</div>
</td>
<td class="table-body__cell name">
<a href="/rankings/womens/player-rankings/636">Nida Dar</a>
</td>
<td class="table-body__cell nationality-logo">
<span class="flag-15 table-body_logo PAK"></span>
<span class="table-body__logo-text">PAK</span>
</td>
<td class="table-body__cell u-text-right rating">232</td>
</tr>
<tr class="table-body">
<td class="table-body__cell table-body__cell--position u-text-right">
<div class="rankings-table__pos-container">
<span class="rankings-table__pos-number">
                                    10
                                </span>
<div class="ranking-pos no-change">
<span class="ranking-pos__no-change-line"></span>
<span class="ranking-pos__change-amount">(0)</span>
</div>
```

```
            </div>
          </td>
          <td class="table-body__cell name">
          <a href="/rankings/womens/player-rankings/3337">Sophie Ecclestone</a>
          </td>
          <td class="table-body__cell nationality-logo">
          <span class="flag-15 table-body_logo ENG"></span>
          <span class="table-body__logo-text">ENG</span>
          </td>
          <td class="table-body__cell u-text-right rating">205</td>
          </tr>
          </tbody>
          </table>
          <div class="btn-wrapper">
          <a class="btn" href="https://www.icc-cricket.com/rankings/womens/player-rankings/odi/all-rounder">Full Table</a
          >
          </div>
          </div>
```

In [44]:
```python
row_headers =[]
for x in soup4c.find_all('thead'):
    for y in x.find_all('th',{'class':"table-head__cell"}):
        row_headers.append(y.text.strip())

row_headers
```

Out[44]: `['Pos', 'Player', 'Team', 'Rating']`

In [45]:
```python
first_all_rounder=soup4c.find("div",class_="rankings-block__top-player").get_text(strip=True,separator = " ").s
first_all_rounder
```

Out[45]: `['1', '(0)', 'Hayley', 'Matthews', 'WI', '373']`

In [46]:
```python
first_all_rounder[0:2]=[''.join(first_all_rounder[0:2])]
first_all_rounder
```

Out[46]: `['1(0)', 'Hayley', 'Matthews', 'WI', '373']`

In [47]:
```python
first_all_rounder[1:3]=[''.join(first_all_rounder[1:3])]
first_all_rounder
```

Out[47]: `['1(0)', 'HayleyMatthews', 'WI', '373']`

In [48]:
```python
table_values=[]
for x in soup4c.find_all('tr')[0:10]:
    td_team_name = x.find_all('td')
    td_val = [y.text.strip('\n').replace('\n','') for y in td_team_name]
    table_values.append(td_val)

table_values
```

Out[48]:
```
[[],
 ['                          2                          (0)',
  'Natalie Sciver',
  'ENG',
  '371'],
 ['                          3                          (0)',
  'Ellyse Perry',
  'AUS',
  '366'],
 ['                          4                          (0)',
  'Marizanne Kapp',
  'SA',
  '349'],
 ['                          5                          (0)',
  'Amelia Kerr',
  'NZ',
  '336'],
 ['                          6                          (0)',
  'Deepti Sharma',
  'IND',
  '322'],
 ['                          7                          (0)',
  'Ashleigh Gardner',
  'AUS',
  '292'],
 ['                          8                          (0)',
  'Jess Jonassen',
  'AUS',
  '250'],
 ['                          9                          (0)',
  'Nida Dar',
  'PAK',
  '232'],
 ['                          10                          (0)',
  'Sophie Ecclestone',
  'ENG',
  '205']]
```

In [49]:
```python
### putting the scrapped details together in one dataframe

top_10_all_rounder = pd.DataFrame(table_values,columns=row_headers)
top_10_all_rounder.loc[0]=first_all_rounder

top_10_all_rounder
```

Out[49]:

	Pos	Player	Team	Rating
0	1(0)	HayleyMatthews	WI	373
1	2 ...	Natalie Sciver	ENG	371
2	3 ...	Ellyse Perry	AUS	366
3	4 ...	Marizanne Kapp	SA	349
4	5 ...	Amelia Kerr	NZ	336
5	6 ...	Deepti Sharma	IND	322
6	7 ...	Ashleigh Gardner	AUS	292
7	8 ...	Jess Jonassen	AUS	250
8	9 ...	Nida Dar	PAK	232
9	10 ...	Sophie Ecclestone	ENG	205

5) Write a python program to scrape mentioned news details from https://www.cnbc.com/world/?region=world and make data frame-

i) Headline ii) Time iii) NewsLink

In [50]:
```
page5 = requests.get('https://www.cnbc.com/world/?region=world')
page5
```

Out[50]:

`<Response [200]>`

In [51]:
```
soup5 = BeautifulSoup(page5.content).find('ul',attrs={'class':"LatestNews-list"})
soup5
```

Out[51]:
```
<ul class="LatestNews-list"><li class="LatestNews-iconCleared LatestNews-item" id="HomePageInternational-latest
News-6-0"><div class="LatestNews-container"><div class="LatestNews-headlineWrapper"><span class="LatestNews-wra
pper"><time class="LatestNews-timestamp">16 Min Ago</time></span><a class="InvestingClubPill-investingClubPillL
ink" data-type="investing-club-button" href="/investingclub"><img alt="CNBC Investing Club" class="InvestingCl
ubPill-investingClubPill InvestingClubPill-latestNews" src="https://static-redesign.cnbcfm.com/dist/f9ace92fca6
61c9f3bdf.svg"/></a><a class="LatestNews-headline" href="https://www.cnbc.com/2023/06/01/were-adding-to-our-pos
ition-in-this-casino-operator-on-a-pullback-.html" title="We're adding to our position in this casino operator
on a pullback ">We're adding to our position in this casino operator on a pullback </a></div></div></li><li cla
ss="LatestNews-iconCleared LatestNews-item" id="HomePageInternational-latestNews-6-1"><div class="LatestNews-co
ntainer"><div class="LatestNews-headlineWrapper"><span class="LatestNews-wrapper"><time class="LatestNews-times
tamp">51 Min Ago</time></span><a class="LatestNews-headline" href="https://www.cnbc.com/2023/06/01/3-signs-you-
may-be-overstepping-at-work.html" title="Are you the 'Dwight' of your office? 3 signs you may be overstepping a
t work">Are you the 'Dwight' of your office? 3 signs you may be overstepping at work</a></div></div></li><li cl
ass="LatestNews-iconCleared LatestNews-item" id="HomePageInternational-latestNews-6-2"><div class="LatestNews-c
ontainer"><div class="LatestNews-headlineWrapper"><span class="LatestNews-wrapper"><time class="LatestNews-time
stamp">54 Min Ago</time></span><a class="LatestNews-headline" href="https://www.cnbc.com/2023/06/01/i-left-the-
us-for-paris-heres-what-french-people-do-differently-than-americans-to-live-long-happy-lives.html" title="I've
lived in Paris for 12 years—what French people do differently than Americans to live happy lives">I've lived in
Paris for 12 years—what French people do differently than Americans to live happy lives</a></div></div></li><li
class="LatestNews-iconCleared LatestNews-item" id="HomePageInternational-latestNews-6-3"><div class="LatestNews
-container"><div class="LatestNews-headlineWrapper"><span class="LatestNews-wrapper"><time class="LatestNews-ti
mestamp">1 Hour Ago</time></span><a class="ProPill-proPillLink" data-type="pro-button" href="/pro/"><img alt="C
NBC Pro" class="LatestNews-proPill ProPill-proPill" src="https://static-redesign.cnbcfm.com/dist/3390fc2824fa58
d008fd.svg"/></a><a class="LatestNews-headline" href="https://www.cnbc.com/2023/06/01/this-stock-is-an-ai-winne
r-despite-near-term-concerns-analysts-say.html" title="This cloud stock is an A.I. winner despite near-term con
cerns, analysts say">This cloud stock is an A.I. winner despite near-term concerns, analysts say</a></div></div
></li><li class="LatestNews-iconCleared LatestNews-item" id="HomePageInternational-latestNews-6-4"><div class="
LatestNews-container"><div class="LatestNews-headlineWrapper"><span class="LatestNews-wrapper"><time class="Lat
estNews-timestamp">1 Hour Ago</time></span><a class="LatestNews-headline" href="https://www.cnbc.com/2023/06/01
/most-hated-brands-in-america-trump-organization-ftx-fox-corporation.html" title="These are the 7 most hated br
ands in America—Elon Musk's Twitter is No. 4">These are the 7 most hated brands in America—Elon Musk's Twitter
is No. 4</a></div></div></li><li class="LatestNews-iconCleared LatestNews-item" id="HomePageInternational-lates
tNews-6-5"><div class="LatestNews-container"><div class="LatestNews-headlineWrapper"><span class="LatestNews-wr
apper"><time class="LatestNews-timestamp">1 Hour Ago</time></span><a class="ProPill-proPillLink" data-type="pro
-button" href="/pro/"><img alt="CNBC Pro" class="LatestNews-proPill ProPill-proPill" src="https://static-redesi
gn.cnbcfm.com/dist/3390fc2824fa58d008fd.svg"/></a><a class="LatestNews-headline" href="https://www.cnbc.com/202
3/06/01/japan-is-in-a-goldilocks-phase-credit-suisse-says-how-to-play-it.html" title="Japan is in a 'Goldilocks
' position, Credit Suisse says. Here's how to play it">Japan is in a 'Goldilocks' position, Credit Suisse says.
Here's how to play it</a></div></div></li><li class="LatestNews-iconCleared LatestNews-item" id="HomePageIntern
ational-latestNews-6-6"><div class="LatestNews-container"><div class="LatestNews-headlineWrapper"><span class="
LatestNews-wrapper"><time class="LatestNews-timestamp">1 Hour Ago</time></span><a class="LatestNews-headline" h
ref="https://www.cnbc.com/2023/06/01/david-sacks-network-desantis.html" title="Meet David Sacks, the friend of
Musk who could play kingmaker for DeSantis">Meet David Sacks, the friend of Musk who could play kingmaker for D
eSantis</a></div></div></li><li class="LatestNews-iconCleared LatestNews-item" id="HomePageInternational-latest
News-6-7"><div class="LatestNews-container"><div class="LatestNews-headlineWrapper"><span class="LatestNews-wra
pper"><time class="LatestNews-timestamp">2 Hours Ago</time></span><a class="LatestNews-headline" href="https://
www.cnbc.com/2023/06/01/heres-how-ai-backed-tools-can-help-worker-stress-and-mental-health.html" title="Here's
how A.I.-backed tools can help with worker stress and mental health">Here's how A.I.-backed tools can help with
worker stress and mental health</a></div></div></li><li class="LatestNews-iconCleared LatestNews-item" id="Home
PageInternational-latestNews-6-8"><div class="LatestNews-container"><div class="LatestNews-headlineWrapper"><sp
an class="LatestNews-wrapper"><time class="LatestNews-timestamp">2 Hours Ago</time></span><a class="LatestNews-
headline" href="https://www.cnbc.com/2023/06/01/british-pm-rishi-sunak-says-ukraines-rightful-place-is-in-nato.
html" title="British PM Rishi Sunak says Ukraine's rightful place is in NATO">British PM Rishi Sunak says Ukrai
ne's rightful place is in NATO</a></div></div></li><li class="LatestNews-iconCleared LatestNews-item" id="HomeP
ageInternational-latestNews-6-9"><div class="LatestNews-container"><div class="LatestNews-headlineWrapper"><spa
n class="LatestNews-wrapper"><time class="LatestNews-timestamp">2 Hours Ago</time></span><a class="LatestNews-h
eadline" href="https://www.cnbc.com/2023/06/01/trump-discussed-classified-document-he-kept-after-leaving-white-
house.html" title="Trump was recorded acknowledging he kept classified doc after leaving office">Trump was reco
rded acknowledging he kept classified doc after leaving office</a></div></div></li><li class="LatestNews-iconCl
eared LatestNews-item" id="HomePageInternational-latestNews-6-10"><div class="LatestNews-container"><div class=
"LatestNews-headlineWrapper"><span class="LatestNews-wrapper"><time class="LatestNews-timestamp">2 Hours Ago</t
ime></span><a class="LatestNews-headline" href="https://www.cnbc.com/2023/06/01/debt-ceiling-bill-updates.html"
title="Schumer seeks to fast-track debt ceiling bill through Senate">Schumer seeks to fast-track debt ceiling b
ill through Senate</a></div></div></li><li class="LatestNews-iconCleared LatestNews-item" id="HomePageInternati
onal-latestNews-6-11"><div class="LatestNews-container"><div class="LatestNews-headlineWrapper"><span class="La
testNews-wrapper"><time class="LatestNews-timestamp">2 Hours Ago</time></span><a class="LatestNews-headline" hr
ef="https://www.cnbc.com/2023/06/01/student-loan-payment-pause-will-end-as-part-of-the-debt-ceiling-deal.html"
title="Biden agrees to end student loan payment pause as part of debt ceiling deal">Biden agrees to end student
loan payment pause as part of debt ceiling deal</a></div></div></li><li class="LatestNews-iconCleared LatestNew
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dlineWrapper"><span class="LatestNews-wrapper"><time class="LatestNews-timestamp">2 Hours Ago</time></span><a c
lass="LatestNews-headline" href="https://www.cnbc.com/2023/06/01/how-to-invest-ahead-of-markets-next-tests-acco
rding-to-top-advisor.html" title="How to invest ahead of market's next tests: Top financial advisor ">How to in
vest ahead of market's next tests: Top financial advisor </a></div></div></li><li class="LatestNews-iconCleared
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roPill ProPill-proPill" src="https://static-redesign.cnbcfm.com/dist/3390fc2824fa58d008fd.svg"/></a><a class="L
atestNews-headline" href="https://www.cnbc.com/2023/06/01/inflation-fed-policy-are-back-in-focus-for-crypto-hea
ding-into-june.html" title="Crypto investors eye inflation, Fed policy as bitcoin girds for summer doldrums">Cr
ypto investors eye inflation, Fed policy as bitcoin girds for summer doldrums</a></div></div></li><li class="La
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eiled-ahead-of-apples-planned-vr-headset-debut.html" title="Meta Quest 3 unveiled ahead of Apple's planned VR h
eadset debut">Meta Quest 3 unveiled ahead of Apple's planned VR headset debut</a></div></div></li><li class="La
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er"><div class="LatestNews-headlineWrapper"><span class="LatestNews-wrapper"><time class="LatestNews-timestamp"
>2 Hours Ago</time></span><a class="LatestNews-headline" href="https://www.cnbc.com/2023/06/01/dollar-general-d
g-q1-earnings-report-2023.html" title="Dollar General stock drops as 'challenging' economy drives dismal earnin
gs report">Dollar General stock drops as 'challenging' economy drives dismal earnings report</a></div></div></l
i><li class="LatestNews-iconCleared LatestNews-item" id="HomePageInternational-latestNews-6-16"><div class="Lat
estNews-container"><div class="LatestNews-headlineWrapper"><span class="LatestNews-wrapper"><time class="Latest
News-timestamp">2 Hours Ago</time></span><a class="LatestNews-headline" href="https://www.cnbc.com/2023/06/01/h
ow-inflation-is-measured-3-examples.html" title="Measuring inflation can be tricky and quirky. Here are 3 examp
les">Measuring inflation can be tricky and quirky. Here are 3 examples</a></div></div></li><li class="LatestNew
s-iconCleared LatestNews-item" id="HomePageInternational-latestNews-6-17"><div class="LatestNews-container"><di
v class="LatestNews-headlineWrapper"><span class="LatestNews-wrapper"><time class="LatestNews-timestamp">2 Hour
s Ago</time></span><a class="LatestNews-headline" href="https://www.cnbc.com/2023/06/01/elon-musk-china-visit-h
eres-what-the-tesla-ceo-was-up-to.html" title="Elon Musk wrapped up his first visit to China in years. Here's w
hat went down">Elon Musk wrapped up his first visit to China in years. Here's what went down</a></div></div></l
i><li class="LatestNews-iconCleared LatestNews-item" id="HomePageInternational-latestNews-6-18"><div class="Lat
estNews-container"><div class="LatestNews-headlineWrapper"><span class="LatestNews-wrapper"><time class="Latest
News-timestamp">3 Hours Ago</time></span><a class="ProPill-proPillLink" data-type="pro-button" href="/pro/"><im
g alt="CNBC Pro" class="LatestNews-proPill ProPill-proPill" src="https://static-redesign.cnbcfm.com/dist/3390fc
2824fa58d008fd.svg"/></a><a class="LatestNews-headline" href="https://www.cnbc.com/2023/06/01/bank-of-america-s
ays-buy-this-little-known-software-stock-that-can-rally-80percent-on-strong-ai-demand.html" title="BofA says th
is little-known software stock can rally 80% on strong A.I. demand">BofA says this little-known software stock
can rally 80% on strong A.I. demand</a></div></div></li><li class="LatestNews-iconCleared LatestNews-item" id="
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News-headline" href="https://www.cnbc.com/2023/06/01/nvidia-nears-1-trillion-valuewhat-youd-have-if-you-investe
d-in-2013.html" title="Nvidia nears $1 trillion valuation—what you'd have if you invested a decade ago">Nvidia
nears $1 trillion valuation—what you'd have if you invested a decade ago</a></div></div></li><li class="LatestN
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urs Ago</time></span><a class="InvestingClubPill-investingClubPillLink" data-type="investing-club-button" href=
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atestNews" src="https://static-redesign.cnbcfm.com/dist/f9ace92fca661c9f3bdf.svg"/></a><a class="LatestNews-hea
dline" href="https://www.cnbc.com/2023/06/01/jim-cramers-top-10-things-to-watch-in-the-stock-market-thursday.ht
ml" title="Jim Cramer's top 10 things to watch in the stock market Thursday">Jim Cramer's top 10 things to watc
h in the stock market Thursday</a></div></div></li><li class="LatestNews-iconCleared LatestNews-item" id="HomeP
ageInternational-latestNews-6-21"><div class="LatestNews-container"><div class="LatestNews-headlineWrapper"><sp
an class="LatestNews-wrapper"><time class="LatestNews-timestamp">3 Hours Ago</time></span><a class="LatestNews-
headline" href="https://www.cnbc.com/2023/06/01/consumers-say-companies-should-support-lgbtq-community-glaad-su
rvey.html" title="Americans say companies should support LGBTQ+ community, GLAAD survey finds">Americans say co
mpanies should support LGBTQ+ community, GLAAD survey finds</a></div></div></li><li class="LatestNews-iconClear
ed LatestNews-item" id="HomePageInternational-latestNews-6-22"><div class="LatestNews-container"><div class="La
testNews-headlineWrapper"><span class="LatestNews-wrapper"><time class="LatestNews-timestamp">3 Hours Ago</time
></span><a class="LatestNews-headline" href="https://www.cnbc.com/2023/06/01/who-is-the-hardest-hit-by-inflatio
n-in-the-us.html" title="Who does inflation hit hardest? Experts weigh in">Who does inflation hit hardest? Expe
rts weigh in</a></div></div></li><li class="LatestNews-iconCleared LatestNews-item" id="HomePageInternational-l
atestNews-6-23"><div class="LatestNews-container"><div class="LatestNews-headlineWrapper"><span class="LatestNe
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e="pro-button" href="/pro/"><img alt="CNBC Pro" class="LatestNews-proPill ProPill-proPill" src="https://static-
redesign.cnbcfm.com/dist/3390fc2824fa58d008fd.svg"/></a><a class="LatestNews-headline" href="https://www.cnbc.c
om/2023/06/01/thursdays-biggest-analyst-calls-on-wall-street.html" title="Thursday's top analyst calls: Target,
Tesla, Toast, Chevron, Meta, Toll Brothers">Thursday's top analyst calls: Target, Tesla, Toast, Chevron, Meta,
Toll Brothers</a></div></div></li><li class="LatestNews-iconCleared LatestNews-item" id="HomePageInternational-
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pe="pro-button" href="/pro/"><img alt="CNBC Pro" class="LatestNews-proPill ProPill-proPill" src="https://static
-redesign.cnbcfm.com/dist/3390fc2824fa58d008fd.svg"/></a><a class="LatestNews-headline" href="https://www.cnbc.
com/2023/06/01/jpmorgan-upgrades-dominos-calling-the-pizza-chain-too-cheap.html" title="JPMorgan upgrades Domin
o's, calling the pizza chain 'too cheap'">JPMorgan upgrades Domino's, calling the pizza chain 'too cheap'</a></
div></div></li><li class="LatestNews-iconCleared LatestNews-item" id="HomePageInternational-latestNews-6-25"><d
iv class="LatestNews-container"><div class="LatestNews-headlineWrapper"><span class="LatestNews-wrapper"><time
class="LatestNews-timestamp">4 Hours Ago</time></span><a class="LatestNews-headline" href="https://www.cnbc.com
/2023/06/01/stocks-making-the-biggest-moves-premarket-m-crm-dg-more.html" title="Stocks making the biggest move
s premarket: Macy's, Salesforce, Dollar General">Stocks making the biggest moves premarket: Macy's, Salesforce,
Dollar General</a></div></div></li><li class="LatestNews-iconCleared LatestNews-item" id="HomePageInternational
-latestNews-6-26"><div class="LatestNews-container"><div class="LatestNews-headlineWrapper"><span class="Latest
News-wrapper"><time class="LatestNews-timestamp">4 Hours Ago</time></span><a class="LatestNews-headline" href="
https://www.cnbc.com/2023/06/01/private-payrolls-rose-by-278000-in-may-well-ahead-of-expectations-adp-says.html
" title="Private payrolls rose by 278,000 in May, well ahead of expectations, ADP says">Private payrolls rose b
y 278,000 in May, well ahead of expectations, ADP says</a></div></div></li><li class="LatestNews-iconCleared La
testNews-item" id="HomePageInternational-latestNews-6-27"><div class="LatestNews-container"><div class="LatestN
ews-headlineWrapper"><span class="LatestNews-wrapper"><time class="LatestNews-timestamp">4 Hours Ago</time></sp
an><a class="LatestNews-headline" href="https://www.cnbc.com/2023/06/01/how-inflation-and-higher-interest-rates
-changed-car-buying.html" title="How inflation and interest rates have reshaped car buying for many Americans">
How inflation and interest rates have reshaped car buying for many Americans</a></div></div></li><li class="Lat
estNews-iconCleared LatestNews-item" id="HomePageInternational-latestNews-6-28"><div class="LatestNews-containe
r"><div class="LatestNews-headlineWrapper"><span class="LatestNews-wrapper"><time class="LatestNews-timestamp">
4 Hours Ago</time></span><a class="LatestNews-headline" href="https://www.cnbc.com/2023/06/01/why-bots-make-it-
so-hard-to-buy-nikes.html" title="Why bots make it so hard to buy Nikes">Why bots make it so hard to buy Nikes<
/a></div></div></li><li class="LatestNews-iconCleared LatestNews-item" id="HomePageInternational-latestNews-6-2
9"><div class="LatestNews-container"><div class="LatestNews-headlineWrapper"><span class="LatestNews-wrapper"><
time class="LatestNews-timestamp">4 Hours Ago</time></span><a class="LatestNews-headline" href="https://www.cnb
c.com/2023/06/01/5-things-to-know-before-the-stock-market-opens-thursday-june-1.html" title="5 things to know b
efore the stock market opens Thursday">5 things to know before the stock market opens Thursday</a></div></div><
/li></ul>
```

In [52]:
```python
headline=[]
time =[]

for x in soup5.find_all('li',{'class':"LatestNews-item"}):
    for y in x.find_all('a',{'class':"LatestNews-headline"}):
        headline.append(y.text)
    for z in x.find_all('time',{'class':"LatestNews-timestamp"}):
        time.append(z.text)
```

In [53]:
```python
print(len(headline),len(time))
```

```
30 30
```

In [54]:
```python
News_link =[]
for a in soup5.find_all('a',href=True):
    href = a.get('href')
    News_link.append(href)
len(News_link)
```

Out[54]: 38

In [55]:
```python
News_link
```

Out[55]: ['/investingclub/',
 'https://www.cnbc.com/2023/06/01/were-adding-to-our-position-in-this-casino-operator-on-a-pullback-.html',
 'https://www.cnbc.com/2023/06/01/3-signs-you-may-be-overstepping-at-work.html',
 'https://www.cnbc.com/2023/06/01/i-left-the-us-for-paris-heres-what-french-people-do-differently-than-american
s-to-live-long-happy-lives.html',
 '/pro/',
 'https://www.cnbc.com/2023/06/01/this-stock-is-an-ai-winner-despite-near-term-concerns-analysts-say.html',
 'https://www.cnbc.com/2023/06/01/most-hated-brands-in-america-trump-organization-ftx-fox-corporation.html',
 '/pro/',
 'https://www.cnbc.com/2023/06/01/japan-is-in-a-goldilocks-phase-credit-suisse-says-how-to-play-it.html',
 'https://www.cnbc.com/2023/06/01/david-sacks-network-desantis.html',
 'https://www.cnbc.com/2023/06/01/heres-how-ai-backed-tools-can-help-worker-stress-and-mental-health.html',
 'https://www.cnbc.com/2023/06/01/british-pm-rishi-sunak-says-ukraines-rightful-place-is-in-nato.html',
 'https://www.cnbc.com/2023/06/01/trump-discussed-classified-document-he-kept-after-leaving-white-house.html',
 'https://www.cnbc.com/2023/06/01/debt-ceiling-bill-updates.html',
 'https://www.cnbc.com/2023/06/01/student-loan-payment-pause-will-end-as-part-of-the-debt-ceiling-deal.html',
 'https://www.cnbc.com/2023/06/01/how-to-invest-ahead-of-markets-next-tests-according-to-top-advisor.html',
 '/pro/',
 'https://www.cnbc.com/2023/06/01/inflation-fed-policy-are-back-in-focus-for-crypto-heading-into-june.html',
 'https://www.cnbc.com/2023/06/01/meta-quest-3-unveiled-ahead-of-apples-planned-vr-headset-debut.html',
 'https://www.cnbc.com/2023/06/01/dollar-general-dg-q1-earnings-report-2023.html',
 'https://www.cnbc.com/2023/06/01/how-inflation-is-measured-3-examples.html',
 'https://www.cnbc.com/2023/06/01/elon-musk-china-visit-heres-what-the-tesla-ceo-was-up-to.html',
 '/pro/',
 'https://www.cnbc.com/2023/06/01/bank-of-america-says-buy-this-little-known-software-stock-that-can-rally-80pe
rcent-on-strong-ai-demand.html',
 'https://www.cnbc.com/2023/06/01/nvidia-nears-1-trillion-valuewhat-youd-have-if-you-invested-in-2013.html',
 '/investingclub/',
 'https://www.cnbc.com/2023/06/01/jim-cramers-top-10-things-to-watch-in-the-stock-market-thursday.html',
 'https://www.cnbc.com/2023/06/01/consumers-say-companies-should-support-lgbtq-community-glaad-survey.html',
 'https://www.cnbc.com/2023/06/01/who-is-the-hardest-hit-by-inflation-in-the-us.html',
 '/pro/',
 'https://www.cnbc.com/2023/06/01/thursdays-biggest-analyst-calls-on-wall-street.html',
 '/pro/',
 'https://www.cnbc.com/2023/06/01/jpmorgan-upgrades-dominos-calling-the-pizza-chain-too-cheap.html',
 'https://www.cnbc.com/2023/06/01/stocks-making-the-biggest-moves-premarket-m-crm-dg-more.html',
 'https://www.cnbc.com/2023/06/01/private-payrolls-rose-by-278000-in-may-well-ahead-of-expectations-adp-says.ht
ml',
 'https://www.cnbc.com/2023/06/01/how-inflation-and-higher-interest-rates-changed-car-buying.html',
 'https://www.cnbc.com/2023/06/01/why-bots-make-it-so-hard-to-buy-nikes.html',
 'https://www.cnbc.com/2023/06/01/5-things-to-know-before-the-stock-market-opens-thursday-june-1.html']

In [56]:
```python
## Removing the non hyperlinks to keep the length of News_link equal to other features of dataframe.
News_link_n = [value for value in News_link if value != "/pro/" and value != '/investingclub/' ]
len(News_link_n)
```

Out[56]: 30

In [58]:
```python
### putting the scrapped details together in one dataframe

News_list= pd.DataFrame(list(zip(headline,time,News_link_n)), columns=['Headlines','Time','News_Link'])
```

In [59]:
```python
## making the last column : news_link hyperlink clickable
def make_clickable(val):
    # target _blank to open new window
    return '<a target="_blank" href="{}">{}</a>'.format(val, val)

News_list.style.format({'News_Link': make_clickable})
```

`Out[59]:`

	Headlines	Time	News_Link
0	We're adding to our position in this casino operator on a pullback	16 Min Ago	https://www.cnbc.com/2023/06/01/were-adding-to-our-position-in-this-casino-operator-on-a-pullback-.html
1	Are you the 'Dwight' of your office? 3 signs you may be overstepping at work	51 Min Ago	https://www.cnbc.com/2023/06/01/3-signs-you-may-be-overstepping-at-work.html
2	I've lived in Paris for 12 years—what French people do differently than Americans to live happy lives	54 Min Ago	https://www.cnbc.com/2023/06/01/i-left-the-us-for-paris-heres-what-french-people-do-differently-than-americans-to-live-long-happy-lives.html
3	This cloud stock is an A.I. winner despite near-term concerns, analysts say	1 Hour Ago	https://www.cnbc.com/2023/06/01/this-stock-is-an-ai-winner-despite-near-term-concerns-analysts-say.html
4	These are the 7 most hated brands in America—Elon Musk's Twitter is No. 4	1 Hour Ago	https://www.cnbc.com/2023/06/01/most-hated-brands-in-america-trump-organization-ftx-fox-corporation.html
5	Japan is in a 'Goldilocks' position, Credit Suisse says. Here's how to play it	1 Hour Ago	https://www.cnbc.com/2023/06/01/japan-is-in-a-goldilocks-phase-credit-suisse-says-how-to-play-it.html
6	Meet David Sacks, the friend of Musk who could play kingmaker for DeSantis	1 Hour Ago	https://www.cnbc.com/2023/06/01/david-sacks-network-desantis.html
7	Here's how A.I.-backed tools can help with worker stress and mental health	2 Hours Ago	https://www.cnbc.com/2023/06/01/heres-how-ai-backed-tools-can-help-worker-stress-and-mental-health.html
8	British PM Rishi Sunak says Ukraine's rightful place is in NATO	2 Hours Ago	https://www.cnbc.com/2023/06/01/british-pm-rishi-sunak-says-ukraines-rightful-place-is-in-nato.html
9	Trump was recorded acknowledging he kept classified doc after leaving office	2 Hours Ago	https://www.cnbc.com/2023/06/01/trump-discussed-classified-document-he-kept-after-leaving-white-house.html
10	Schumer seeks to fast-track debt ceiling bill through Senate	2 Hours Ago	https://www.cnbc.com/2023/06/01/debt-ceiling-bill-updates.html
11	Biden agrees to end student loan payment pause as part of debt ceiling deal	2 Hours Ago	https://www.cnbc.com/2023/06/01/student-loan-payment-pause-will-end-as-part-of-the-debt-ceiling-deal.html
12	How to invest ahead of market's next tests: Top financial advisor	2 Hours Ago	https://www.cnbc.com/2023/06/01/how-to-invest-ahead-of-markets-next-tests-according-to-top-advisor.html
13	Crypto investors eye inflation, Fed policy as bitcoin girds for summer doldrums	2 Hours Ago	https://www.cnbc.com/2023/06/01/inflation-fed-policy-are-back-in-focus-for-crypto-heading-into-june.html
14	Meta Quest 3 unveiled ahead of Apple's planned VR headset debut	2 Hours Ago	https://www.cnbc.com/2023/06/01/meta-quest-3-unveiled-ahead-of-apples-planned-vr-headset-debut.html
15	Dollar General stock drops as 'challenging' economy drives dismal earnings report	2 Hours Ago	https://www.cnbc.com/2023/06/01/dollar-general-dg-q1-earnings-report-2023.html
16	Measuring inflation can be tricky and quirky. Here are 3 examples	2 Hours Ago	https://www.cnbc.com/2023/06/01/how-inflation-is-measured-3-examples.html
17	Elon Musk wrapped up his first visit to China in years. Here's what went down	2 Hours Ago	https://www.cnbc.com/2023/06/01/elon-musk-china-visit-heres-what-the-tesla-ceo-was-up-to.html
18	BofA says this little-known software stock can rally 80% on strong A.I. demand	3 Hours Ago	https://www.cnbc.com/2023/06/01/bank-of-america-says-buy-this-little-known-software-stock-that-can-rally-80percent-on-strong-ai-demand.html
19	Nvidia nears $1 trillion valuation—what you'd have if you invested a decade ago	3 Hours Ago	https://www.cnbc.com/2023/06/01/nvidia-nears-1-trillion-valuewhat-youd-have-if-you-invested-in-2013.html
20	Jim Cramer's top 10 things to watch in the stock market Thursday	3 Hours Ago	https://www.cnbc.com/2023/06/01/jim-cramers-top-10-things-to-watch-in-the-stock-market-thursday.html
21	Americans say companies should support LGBTQ+ community, GLAAD survey finds	3 Hours Ago	https://www.cnbc.com/2023/06/01/consumers-say-companies-should-support-lgbtq-community-glaad-survey.html
22	Who does inflation hit hardest? Experts weigh in	3 Hours Ago	https://www.cnbc.com/2023/06/01/who-is-the-hardest-hit-by-inflation-in-the-us.html
23	Thursday's top analyst calls: Target, Tesla, Toast, Chevron, Meta, Toll Brothers	3 Hours Ago	https://www.cnbc.com/2023/06/01/thursdays-biggest-analyst-calls-on-wall-street.html
24	JPMorgan upgrades Domino's, calling the pizza chain 'too cheap'	4 Hours Ago	https://www.cnbc.com/2023/06/01/jpmorgan-upgrades-dominos-calling-the-pizza-chain-too-cheap.html
25	Stocks making the biggest moves premarket: Macy's, Salesforce, Dollar General	4 Hours Ago	https://www.cnbc.com/2023/06/01/stocks-making-the-biggest-moves-premarket-m-crm-dg-more.html
26	Private payrolls rose by 278,000 in May, well ahead of expectations, ADP says	4 Hours Ago	https://www.cnbc.com/2023/06/01/private-payrolls-rose-by-278000-in-may-well-ahead-of-expectations-adp-says.html
27	How inflation and interest rates have reshaped car buying for many Americans	4 Hours Ago	https://www.cnbc.com/2023/06/01/how-inflation-and-higher-interest-rates-changed-car-buying.html
28	Why bots make it so hard to buy Nikes	4 Hours Ago	https://www.cnbc.com/2023/06/01/why-bots-make-it-so-hard-to-buy-nikes.html
29	5 things to know before the stock market opens Thursday	4 Hours Ago	https://www.cnbc.com/2023/06/01/5-things-to-know-before-the-stock-market-opens-thursday-june-1.html

6) Write a python program to scrape the details of most downloaded articles from AI in last 90 days.https://www.journals.elsevier.com/artificial-intelligence/most-downloaded-articles Scrape below mentioned details and make data frame-

i) Paper Title

ii) Authors

iii) Published Date

iv) Paper URL

```
In [60]:   page6 = requests.get('https://www.journals.elsevier.com/artificial-intelligence/most-downloaded-articles')
           page6
```

```
Out[60]:   <Response [200]>
```

```
In [61]:   soup6 = BeautifulSoup(page6.content).find('ul',attrs={'class':"sc-9zxyh7-0 cMKaMj"})
```

```
In [62]:   paper_title=[]
           authors=[]
           published_date=[]
           for x in soup6.find_all('li',{'class':"sc-9zxyh7-1 sc-9zxyh7-2 kOEIEO hvoVxs"}):
               for y in x.find_all('h2',{'class':"sc-1qrq3sd-1 gRGSUS sc-1nmom32-0 sc-1nmom32-1 btcbYu goSKRg"}):
                   paper_title.append(y.text)
               for z in x.find_all('span',{'class':"sc-1w3fpd7-0 dnCnAO"}):
                   authors.append(z.text)
               for t in x.find_all('span',{'class':"sc-1thf9ly-2 dvggWt"}):
                   published_date.append(t.text)
```

```
In [63]:   Paper_URL =[]
           for a in soup6.find_all('a',href=True):
               href = a.get('href')
               Paper_URL.append(href)
           len(Paper_URL)
```

```
Out[63]:   24
```

```
In [64]:   print(len(paper_title),len(authors),len(published_date),len(Paper_URL))
```

```
           24 24 24 24
```

```
In [65]:   AI_articles= pd.DataFrame(list(zip(paper_title,authors,published_date,Paper_URL)), columns=['Paper Title','Auth
```

```
In [66]:   AI_articles
```

Out[66]:

	Paper Title	Authors	Published Date	Paper URL
0	Reward is enough	David Silver, Satinder Singh, Doina Precup, Ri...	October 2021	https://www.sciencedirect.com/science/article/...
1	Explanation in artificial intelligence: Insigh...	Tim Miller	February 2019	https://www.sciencedirect.com/science/article/...
2	Creativity and artificial intelligence	Margaret A. Boden	August 1998	https://www.sciencedirect.com/science/article/...
3	Conflict-based search for optimal multi-agent ...	Guni Sharon, Roni Stern, Ariel Felner, Nathan ...	February 2015	https://www.sciencedirect.com/science/article/...
4	Knowledge graphs as tools for explainable mach...	Ilaria Tiddi, Stefan Schlobach	January 2022	https://www.sciencedirect.com/science/article/...
5	Law and logic: A review from an argumentation ...	Henry Prakken, Giovanni Sartor	October 2015	https://www.sciencedirect.com/science/article/...
6	Between MDPs and semi-MDPs: A framework for te...	Richard S. Sutton, Doina Precup, Satinder Singh	August 1999	https://www.sciencedirect.com/science/article/...
7	Explaining individual predictions when feature...	Kjersti Aas, Martin Jullum, Anders Løland	September 2021	https://www.sciencedirect.com/science/article/...
8	Multiple object tracking: A literature review	Wenhan Luo, Junliang Xing and 4 more	April 2021	https://www.sciencedirect.com/science/article/...
9	A survey of inverse reinforcement learning: Ch...	Saurabh Arora, Prashant Doshi	August 2021	https://www.sciencedirect.com/science/article/...
10	Evaluating XAI: A comparison of rule-based and...	Jasper van der Waa, Elisabeth Nieuwburg, Anita...	February 2021	https://www.sciencedirect.com/science/article/...
11	Explainable AI tools for legal reasoning about...	Joe Collenette, Katie Atkinson, Trevor Bench-C...	April 2023	https://www.sciencedirect.com/science/article/...
12	Hard choices in artificial intelligence	Roel Dobbe, Thomas Krendl Gilbert, Yonatan Mintz	November 2021	https://www.sciencedirect.com/science/article/...
13	Assessing the communication gap between AI mod...	Oskar Wysocki, Jessica Katharine Davies and 5 ...	March 2023	https://www.sciencedirect.com/science/article/...
14	Explaining black-box classifiers using post-ho...	Eoin M. Kenny, Courtney Ford, Molly Quinn, Mar...	May 2021	https://www.sciencedirect.com/science/article/...
15	The Hanabi challenge: A new frontier for AI re...	Nolan Bard, Jakob N. Foerster and 13 more	March 2020	https://www.sciencedirect.com/science/article/...
16	Wrappers for feature subset selection	Ron Kohavi, George H. John	December 1997	https://www.sciencedirect.com/science/article/...
17	Artificial cognition for social human–robot in...	Séverin Lemaignan, Mathieu Warnier and 3 more	June 2017	https://www.sciencedirect.com/science/article/...
18	A review of possible effects of cognitive bias...	Tomáš Kliegr, Štěpán Bahník, Johannes Fürnkranz	June 2021	https://www.sciencedirect.com/science/article/...
19	The multifaceted impact of Ada Lovelace in the...	Luigia Carlucci Aiello	June 2016	https://www.sciencedirect.com/science/article/...
20	Robot ethics: Mapping the issues for a mechani...	Patrick Lin, Keith Abney, George Bekey	April 2011	https://www.sciencedirect.com/science/article/...
21	Reward (Mis)design for autonomous driving	W. Bradley Knox, Alessandro Allievi and 3 more	March 2023	https://www.sciencedirect.com/science/article/...
22	Planning and acting in partially observable st...	Leslie Pack Kaelbling, Michael L. Littman, Ant...	May 1998	https://www.sciencedirect.com/science/article/...
23	What do we want from Explainable Artificial In...	Markus Langer, Daniel Oster and 6 more	July 2021	https://www.sciencedirect.com/science/article/...

In [67]:

```python
def make_clickable(val):
    # target _blank to open new window
    return '<a target="_blank" href="{}">{}</a>'.format(val, val)

AI_articles.style.format({'Paper URL': make_clickable})
```

`Out[67]:`

	Paper Title	Authors	Published Date	Paper URL
0	Reward is enough	David Silver, Satinder Singh, Doina Precup, Richard S. Sutton	October 2021	https://www.sciencedirect.com/science/article/pii/S0004370221000862
1	Explanation in artificial intelligence: Insights from the social sciences	Tim Miller	February 2019	https://www.sciencedirect.com/science/article/pii/S0004370218305988
2	Creativity and artificial intelligence	Margaret A. Boden	August 1998	https://www.sciencedirect.com/science/article/pii/S0004370298000551
3	Conflict-based search for optimal multi-agent pathfinding	Guni Sharon, Roni Stern, Ariel Felner, Nathan R. Sturtevant	February 2015	https://www.sciencedirect.com/science/article/pii/S0004370214001386
4	Knowledge graphs as tools for explainable machine learning: A survey	Ilaria Tiddi, Stefan Schlobach	January 2022	https://www.sciencedirect.com/science/article/pii/S0004370221001788
5	Law and logic: A review from an argumentation perspective	Henry Prakken, Giovanni Sartor	October 2015	https://www.sciencedirect.com/science/article/pii/S0004370215000910
6	Between MDPs and semi-MDPs: A framework for temporal abstraction in reinforcement learning	Richard S. Sutton, Doina Precup, Satinder Singh	August 1999	https://www.sciencedirect.com/science/article/pii/S0004370299000521
7	Explaining individual predictions when features are dependent: More accurate approximations to Shapley values	Kjersti Aas, Martin Jullum, Anders Løland	September 2021	https://www.sciencedirect.com/science/article/pii/S0004370221000539
8	Multiple object tracking: A literature review	Wenhan Luo, Junliang Xing and 4 more	April 2021	https://www.sciencedirect.com/science/article/pii/S0004370220301958
9	A survey of inverse reinforcement learning: Challenges, methods and progress	Saurabh Arora, Prashant Doshi	August 2021	https://www.sciencedirect.com/science/article/pii/S0004370221000515
10	Evaluating XAI: A comparison of rule-based and example-based explanations	Jasper van der Waa, Elisabeth Nieuwburg, Anita Cremers, Mark Neerincx	February 2021	https://www.sciencedirect.com/science/article/pii/S0004370220301533
11	Explainable AI tools for legal reasoning about cases: A study on the European Court of Human Rights	Joe Collenette, Katie Atkinson, Trevor Bench-Capon	April 2023	https://www.sciencedirect.com/science/article/pii/S0004370223000073
12	Hard choices in artificial intelligence	Roel Dobbe, Thomas Krendl Gilbert, Yonatan Mintz	November 2021	https://www.sciencedirect.com/science/article/pii/S0004370221001065
13	Assessing the communication gap between AI models and healthcare professionals: Explainability, utility and trust in AI-driven clinical decision-making	Oskar Wysocki, Jessica Katharine Davies and 5 more	March 2023	https://www.sciencedirect.com/science/article/pii/S0004370222001795
14	Explaining black-box classifiers using post-hoc explanations-by-example: The effect of explanations and error-rates in XAI user studies	Eoin M. Kenny, Courtney Ford, Molly Quinn, Mark T. Keane	May 2021	https://www.sciencedirect.com/science/article/pii/S0004370221000102
15	The Hanabi challenge: A new frontier for AI research	Nolan Bard, Jakob N. Foerster and 13 more	March 2020	https://www.sciencedirect.com/science/article/pii/S0004370219300116
16	Wrappers for feature subset selection	Ron Kohavi, George H. John	December 1997	https://www.sciencedirect.com/science/article/pii/S000437029700043X
17	Artificial cognition for social human–robot interaction: An implementation	Séverin Lemaignan, Mathieu Warnier and 3 more	June 2017	https://www.sciencedirect.com/science/article/pii/S0004370216300790
18	A review of possible effects of cognitive biases on interpretation of rule-based machine learning models	Tomáš Kliegr, Štěpán Bahník, Johannes Fürnkranz	June 2021	https://www.sciencedirect.com/science/article/pii/S0004370221000096
19	The multifaceted impact of Ada Lovelace in the digital age	Luigia Carlucci Aiello	June 2016	https://www.sciencedirect.com/science/article/pii/S0004370216300224
20	Robot ethics: Mapping the issues for a mechanized world	Patrick Lin, Keith Abney, George Bekey	April 2011	https://www.sciencedirect.com/science/article/pii/S0004370211000178
21	Reward (Mis)design for autonomous driving	W. Bradley Knox, Alessandro Allievi and 3 more	March 2023	https://www.sciencedirect.com/science/article/pii/S0004370222001692
22	Planning and acting in partially observable stochastic domains	Leslie Pack Kaelbling, Michael L. Littman, Anthony R. Cassandra	May 1998	https://www.sciencedirect.com/science/article/pii/S000437029800023X
23	What do we want from Explainable Artificial Intelligence (XAI)? – A stakeholder perspective on XAI and a conceptual model guiding interdisciplinary XAI research	Markus Langer, Daniel Oster and 6 more	July 2021	https://www.sciencedirect.com/science/article/pii/S0004370221000242

7) Write a python program to scrape mentioned details from dineout.co.in and make data frame-

i) Restaurant name

ii) Cuisine

iii) Location

iv) Ratings

v) Image URL

```
In [68]:  page7 = requests.get('https://www.dineout.co.in/delhi-restaurants/buffet-special')
          page7
```

```
Out[68]:  <Response [200]>
```

```
In [69]:  soup7 = BeautifulSoup(page7.content,"html.parser").find('div',attrs={'class':"restnt-card-wrap-new"})
          soup7
```

Out[69]: `<div class="restnt-card-wrap-new" data-widget="/dineout.co.in$0.0.2/girf/components/listing-restarant/index" id="w1-restarant"><div class="restnt-card restaurant"><div class="restnt-main-wrap clearfix"><div class="img-wrap"><div analytics-action="RestaurantImageClick" analytics-label="86792_Castle Barbeque" class="img cursor" data-link="/delhi/castle-barbeque-connaught-place-central-delhi-86792" data-w-onclick="cardClickHandler|w1-restarant"></div><div class="restnt-rating rating-4">4</div></div><div class="restnt-detail-wrap"><div analytics-action="RestaurantCardClick" analytics-label="86792_Castle Barbeque" class="restaurant-info-section restnt-detail" data-link="/delhi/castle-barbeque-connaught-place-central-delhi-86792" data-w-onclick="cardClickHandler|w1-restarant"><div class="restnt-rating-widget pull-right text-right"><div class="restnt-rating rating-4 hide">4.3</div><div class="rating-txt hide">232 votes</div></div><div class="restnt-info cursor" data-gatype="RestaurantNameClick"><a analytics-action="RestaurantCardClick" analytics-label="86792_Castle Barbeque" class="restnt-name ellipsis" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/delhi/castle-barbeque-connaught-place-central-delhi-86792">Castle Barbeque<div class="restnt-loc ellipsis" data-w-onclick="stopClickPropagation|w1-restarant"><a data-name="Connaught Place" data-type="LocalityClick" href="/delhi-restaurants/central-delhi/connaught-place">Connaught Place, <a data-name="Central Delhi" data-type="AreaClick" href="/delhi-restaurants/central-delhi">Central Delhi</div></div><div class="detail-info"> ₹ 2,000 for 2 (approx) | <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/chinese-cuisine">Chinese, <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/north-indian-cuisine">North Indian <li class="ellipsis"> </div><div class="add-new-section" style="white-space: nowrap; overflow-x: auto;"><a analytics-action="RestTagClick" analytics-label="Dineout Pay" class="btn pay cursor" data-link="/dineout-pay/instant-discount/how-it-works" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/dineout-pay/instant-discount/how-it-works" rel="noopener" style="color:#F67373;background:#FFF4F4" target="_blank">Dineout Pay</div></div></div></div><div class="restnt-card restaurant"><div class="restnt-main-wrap clearfix"><div class="img-wrap"><div analytics-action="RestaurantImageClick" analytics-label="59633_Jungle Jamboree" class="img cursor" data-link="/delhi/jungle-jamboree-lajpat-nagar-3-south-delhi-59633" data-w-onclick="cardClickHandler|w1-restarant"></div><div class="restnt-rating rating-4">3.9</div></div><div class="restnt-detail-wrap"><div analytics-action="RestaurantCardClick" analytics-label="59633_Jungle Jamboree" class="restaurant-info-section restnt-detail" data-link="/delhi/jungle-jamboree-lajpat-nagar-3-south-delhi-59633" data-w-onclick="cardClickHandler|w1-restarant"><div class="restnt-rating-widget pull-right text-right"><div class="restnt-rating rating-4 hide">4.3</div><div class="rating-txt hide">232 votes</div></div><div class="restnt-info cursor" data-gatype="RestaurantNameClick"><a analytics-action="RestaurantCardClick" analytics-label="59633_Jungle Jamboree" class="restnt-name ellipsis" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/delhi/jungle-jamboree-lajpat-nagar-3-south-delhi-59633">Jungle Jamboree<div class="restnt-loc ellipsis" data-w-onclick="stopClickPropagation|w1-restarant">3CS Mall, <a data-name="Lajpat Nagar - 3" data-type="LocalityClick" href="/delhi-restaurants/south-delhi/lajpat-nagar-3">Lajpat Nagar - 3, <a data-name="South Delhi" data-type="AreaClick" href="/delhi-restaurants/south-delhi">South Delhi</div></div><div class="detail-info"> ₹ 1,680 for 2 (approx) | <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/north-indian-cuisine">North Indian, <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/asian-cuisine">Asian, <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/italian-cuisine">Italian <li class="ellipsis"> </div><div class="add-new-section" style="white-space: nowrap; overflow-x: auto;"><a analytics-label="Dineout Pay" class="btn pay cursor" data-link="/dineout-pay/instant-discount/how-it-works" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/dineout-pay/instant-discount/how-it-works" rel="noopener" style="color:#F67373;background:#FFF4F4" target="_blank">Dineout Pay</div></div></div></div><div class="restnt-card restaurant"><div class="restnt-main-wrap clearfix"><div class="img-wrap"><div analytics-action="RestaurantImageClick" analytics-label="406_Cafe Knosh" class="img cursor" data-link="/delhi/cafe-knosh-shahdara-east-delhi-406" data-w-onclick="cardClickHandler|w1-restarant"></div><div class="restnt-rating rating-4">4.3</div></div><div class="restnt-detail-wrap"><div analytics-action="RestaurantCardClick" analytics-label="406_Cafe Knosh" class="restaurant-info-section restnt-detail" data-link="/delhi/cafe-knosh-shahdara-east-delhi-406" data-w-onclick="cardClickHandler|w1-restarant"><div class="restnt-rating-widget pull-right text-right"><div class="restnt-rating rating-4 hide">4.3</div><div class="rating-txt hide">232 votes</div></div><div class="restnt-info cursor" data-gatype="RestaurantNameClick"><a analytics-action="RestaurantCardClick" analytics-label="406_Cafe Knosh" class="restnt-name ellipsis" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/delhi/cafe-knosh-shahdara-east-delhi-406">Cafe Knosh<div class="restnt-loc ellipsis" data-w-onclick="stopClickPropagation|w1-restarant">The Leela Ambience Convention Hotel,<a data-name="Shahdara" data-type="LocalityClick" href="/delhi-restaurants/east-delhi/shahdara">Shahdara, <a data-name="East Delhi" data-type="AreaClick" href="/delhi-restaurants/east-delhi">East Delhi</div></div><div class="detail-info"> ₹ 3,000 for 2 (approx) | <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/italian-cuisine">Italian, <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/continental-cuisine">Continental <li class="ellipsis"> </div><div class="add-new-section" style="white-space: nowrap; overflow-x: auto;"><a analytics-action="RestTagClick" analytics-label="Dineout Pay" class="btn pay cursor" data-link="/dineout-pay/how-it-works" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/dineout-pay/how-it-works" rel="noopener" style="color:#F67373;background:#FFF4F4" target="_blank">Dineout Pay</div></div></div></div><div class="restnt-card restaurant"><div class="restnt-main-wrap clearfix"><div class="img-wrap"><div analytics-action="RestaurantImageClick" analytics-label="38113_Castle's Barbeque" class="img cursor" data-link="/delhi/castles-barbeque-tagore-garden-west-delhi-38113" data-w-onclick="cardClickHandler|w1-restarant"><img alt="Castle's Barbeque" class="lazy-load-img no-img" data-gatype="RestaurantImageClick" data-src="https://im1.dineout.co.in/images/uploads/restaurant/sharpen/3/j/o/p38113-15959192065f1fcb666130c.jpg?tr=tr:n-medium" data-`

url="/delhi/castles-barbeque-tagore-garden-west-delhi-38113" data-w-onclick="cardClickHandler"/></div><div class="restnt-rating rating-4">3.9</div></div><div class="restnt-detail-wrap"><div analytics-action="RestaurantCardClick" analytics-label="38113_Castle's Barbeque" class="restaurant-info-section restnt-detail" data-link="/delhi/castles-barbeque-tagore-garden-west-delhi-38113" data-w-onclick="cardClickHandler|w1-restarant"><div class="restnt-rating-widget pull-right text-right"><div class="restnt-rating rating-4 hide">4.3</div><div class="rating-txt hide">232 votes</div></div><div class="restnt-info cursor" data-gatype="RestaurantNameClick"><a analytics-action="RestaurantCardClick" analytics-label="38113_Castle's Barbeque" class="restnt-name ellipsis" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/delhi/castles-barbeque-tagore-garden-west-delhi-38113">Castle's Barbeque<div class="restnt-loc ellipsis" data-w-onclick="stopClickPropagation|w1-restarant">Pacific Mall,<a data-name="Tagore Garden" data-type="LocalityClick" href="/delhi-restaurants/west-delhi/tagore-garden">Tagore Garden, <a data-name="West Delhi" data-type="AreaClick" href="/delhi-restaurants/west-delhi">West Delhi</div></div><div class="detail-info"> ₹ 2,000 for 2 (approx) | <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/chinese-cuisine">Chinese, <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/north-indian-cuisine">North Indian <li class="ellipsis"> </div><div class="add-new-section" style="white-space: nowrap; overflow-x: auto;"><a analytics-action="RestTagClick" analytics-label="Dineout Pay" class="btn pay cursor" data-link="/dineout-pay/instant-discount/how-it-works" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/dineout-pay/instant-discount/how-it-works" rel="noopener" style="color:#F67373;background:#FFF4F4" target="_blank">Dineout Pay</div></div></div></div><div class="restnt-card restaurant"><div class="restnt-main-wrap clearfix"><div class="img-wrap"><div analytics-action="RestaurantImageClick" analytics-label="79307_The Barbeque Company" class="img cursor" data-link="/delhi/the-barbeque-company-sector-38a-noida-79307" data-w-onclick="cardClickHandler|w1-restarant"></div><div class="restnt-rating rating-4">3.9</div></div><div class="restnt-detail-wrap"><div analytics-action="RestaurantCardClick" analytics-label="79307_The Barbeque Company" class="restaurant-info-section restnt-detail" data-link="/delhi/the-barbeque-company-sector-38a-noida-79307" data-w-onclick="cardClickHandler|w1-restarant"><div class="restnt-rating-widget pull-right text-right"><div class="restnt-rating rating-4 hide">4.3</div><div class="rating-txt hide">232 votes</div></div><div class="restnt-info cursor" data-gatype="RestaurantNameClick"><a analytics-action="RestaurantCardClick" analytics-label="79307_The Barbeque Company" class="restnt-name ellipsis" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/delhi/the-barbeque-company-sector-38a-noida-79307">The Barbeque Company<div class="restnt-loc ellipsis" data-w-onclick="stopClickPropagation|w1-restarant">Gardens Galleria,<a data-name="Sector 38A" data-type="LocalityClick" href="/delhi-restaurants/noida/sector-38a">Sector 38A, <a data-name="Noida" data-type="AreaClick" href="/delhi-restaurants/noida">Noida</div></div><div class="detail-info"> ₹ 1,700 for 2 (approx) | <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/north-indian-cuisine">North Indian, <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/chinese-cuisine">Chinese <li class="ellipsis"> </div><div class="add-new-section" style="white-space: nowrap; overflow-x: auto;"><a analytics-action="RestTagClick" analytics-label="Dineout Pay" class="btn pay cursor" data-link="/dineout-pay/instant-discount/how-it-works" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/dineout-pay/instant-discount/how-it-works" rel="noopener" style="color:#F67373;background:#FFF4F4" target="_blank">Dineout Pay</div></div></div></div><div class="restnt-card restaurant"><div class="restnt-main-wrap clearfix"><div class="img-wrap"><div analytics-action="RestaurantImageClick" analytics-label="2687_India Grill" class="img cursor" data-link="/delhi/india-grill-saket-south-delhi-2687" data-w-onclick="cardClickHandler|w1-restarant"></div><div class="restnt-rating rating-4">3.9</div></div><div class="restnt-detail-wrap"><div analytics-action="RestaurantCardClick" analytics-label="2687_India Grill" class="restaurant-info-section restnt-detail" data-link="/delhi/india-grill-saket-south-delhi-2687" data-w-onclick="cardClickHandler|w1-restarant"><div class="restnt-rating-widget pull-right text-right"><div class="restnt-rating rating-4 hide">4.3</div><div class="rating-txt hide">232 votes</div></div><div class="restnt-info cursor" data-gatype="RestaurantNameClick"><a analytics-action="RestaurantCardClick" analytics-label="2687_India Grill" class="restnt-name ellipsis" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/delhi/india-grill-saket-south-delhi-2687">India Grill<div class="restnt-loc ellipsis" data-w-onclick="stopClickPropagation|w1-restarant">Hilton Garden Inn,<a data-name="Saket" data-type="LocalityClick" href="/delhi-restaurants/south-delhi/saket">Saket, <a data-name="South Delhi" data-type="AreaClick" href="/delhi-restaurants/south-delhi">South Delhi</div></div><div class="detail-info"> ₹ 2,400 for 2 (approx) | <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/north-indian-cuisine">North Indian, <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/italian-cuisine">Italian <li class="ellipsis"> </div><div class="add-new-section" style="white-space: nowrap; overflow-x: auto;"><a analytics-action="RestTagClick" analytics-label="Dineout Pay" class="btn pay cursor" data-link="/dineout-pay/how-it-works" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/dineout-pay/how-it-works" rel="noopener" style="color:#F67373;background:#FFF4F4" target="_blank">Dineout Pay</div></div></div></div><div class="restnt-card restaurant"><div class="restnt-main-wrap clearfix"><div class="img-wrap"><div analytics-action="RestaurantImageClick" analytics-label="52501_Delhi Barbeque" class="img cursor" data-link="/delhi/delhi-barbeque-mahipalpur-south-delhi-52501" data-w-onclick="cardClickHandler|w1-restarant"></div><div class="restnt-rating rating-4">3.7</div></div><div class="restnt-detail-wrap"><div analytics-action="RestaurantCardClick" analytics-label="52501_Delhi Barbeque" class="restaurant-info-section restnt-detail" data-link="/delhi/delhi-barbeque-mahipalpur-south-delhi-52501" data-w-onclick="cardClickHandler|w1-restarant"><div class="restnt-rating-widget pull-right text-right"><div class="restnt-rating rating-4 hide">4.3</div><div class="rating-txt hide">232 votes</div></div><div class="restnt-info cursor" data-gatype="RestaurantNameClick"><a analytics-action="RestaurantCardClick" analytics-label="52501_Delhi Barbeque" class="restnt-name ellipsis" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/delhi/delhi-barbeque-mahipalpur-south-delhi-52501">Delhi Barbeque<div class="restnt-loc ellipsis" data-w-onclick="stopClickPropagation|w1-restarant">Taurus Sarovar Portico,<a data-name="Mahipalpur" data-type="LocalityClick" href="/delhi-restaurants/south-delhi/mahipalpur">Mahipalpur, <a data-name="South Delhi" data-type="AreaClick" href="/delhi-restaurants/south-delhi">South Delhi</div></div><div class="detail-info"> ₹ 1,800 for 2 (approx) | <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/north-indian-cuisine">North Indian <li class="ellipsis"> </div><div class="add-new-section" style="white-space: nowrap; overflow-x: auto;"><a analytics-action="RestTagClick" analytics-label="Dineout Pay" class="btn pay cursor" data-link="/dineout-pay/instant-discount/how-it-works" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/dineout-pay/instant-discount/how-it-works" rel="noopener" style="color:#F67373;background:#FFF4F4" target="_blank">Dineout Pay</div></div></div></div><div class="restnt-card restaurant"><div class="restnt-main-wrap clearfix"><div class="img-wrap"><div analytics-action="RestaurantImageClick" analytics-label="34822_The Monarch - Bar Be Que Village" class="img cursor" data-link="/delhi/the-monarch-bar-be-que-village-indirapuram-ghaziabad-34822" data-w-onclick="cardClickHandler|w1-restarant"></div><div class="restnt-rating rating-4">3.8</div></div><div class="restnt-detail-wrap"><div analytics-action="RestaurantCardClick" analytics-label="34822_The Monarch - Bar Be Que Village" class="restaurant-info-section restnt-detail" data-link="/delhi/the-monarch-bar-be-que-village-indirapuram-ghaziabad-34822" data-w-onclick="cardClickHandler|w1-restarant"><div class="restnt-rating-widget pull-right text-right"><div class="restnt-rating rating-4 hide">4.3</div><div class="rating-txt hide">232 votes</div></div><div class="restnt-info cursor" data-gatype="RestaurantNameClick"><a analytics-action="RestaurantCardClick" analytics-label="34822_The Monarch - Bar Be Que Village" class="restnt-name ellipsis" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/delhi/the-monarch-bar-be-que-village-indirapuram-ghaziabad-34822">The Monarch - Bar Be Que Village<div class="restnt-loc ellipsis" data-w-onclick="stopClickPropagation|w1-restarant">Indirapuram Habitat Centre,<a data-name="Indirapuram" data-type="LocalityClick" href="/delhi-restaurants/ghaziabad/indirapuram">Indirapuram, <a data-name="Ghaziabad" data-type="AreaClick" href="/delhi-restaurants/ghaziabad">Ghaziabad</div></div><div class="detail-info"> ₹ 1,900 for 2 (approx) | <a data-w-onclick="stopClickPropagation|w1-restarant" href="/delhi-restaurants/north-indian-cuisine">North Indian <li class="ellipsis"> </div><div class="add-new-section" style="white-space: nowrap; overflow-x: auto;"><a analytics-action="RestTagClick" analytics-label="Dineout Pay" class="btn pay cursor" data-link="/dineout-pay/instant-discount/how-it-works" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/dineout-pay/instant-discount/how-it-works" rel="noopener" style="color:#F67373;background:#FFF4F4" target="_blank">Dineout Pay<img class="lazy-load-img" da

```
ta-src="https://im1.dineout.co.in/images/uploads/misc/2019/Jan/17/information.png"/></a></div></div></div></div
></div><div class="restnt-card restaurant"><div class="restnt-main-wrap clearfix"><div class="img-wrap"><div an
alytics-action="RestaurantImageClick" analytics-label="549_Indian Grill Room" class="img cursor" data-link="/de
lhi/indian-grill-room-golf-course-road-gurgaon-549" data-w-onclick="cardClickHandler|w1-restarant"><img alt="In
dian Grill Room" class="lazy-load-img no-img" data-gatype="RestaurantImageClick" data-src="https://im1.dineout.
co.in/images/uploads/restaurant/sharpen/5/y/f/p549-165000147262590640c0afc.jpg?tr=tr:n-medium" data-url="/delhi
/indian-grill-room-golf-course-road-gurgaon-549" data-w-onclick="cardClickHandler"/></div><div class="restnt-ra
ting rating-4">4.3</div></div><div class="restnt-detail-wrap"><div analytics-action="RestaurantCardClick" analy
tics-label="549_Indian Grill Room" class="restaurant-info-section restnt-detail" data-link="/delhi/indian-grill
-room-golf-course-road-gurgaon-549" data-w-onclick="cardClickHandler"><div class="restnt-rating-wi
dget pull-right text-right"><div class="restnt-rating rating-4 hide">4.3</div><div class="rating-txt hide">232
votes</div></div><div class="restnt-info cursor" data-gatype="RestaurantNameClick"><a analytics-action="Restaur
antCardClick" analytics-label="549_Indian Grill Room" class="restnt-name ellipsis" data-w-onclick="sendAnalytic
sCommon|w1-restarant" href="/delhi/indian-grill-room-golf-course-road-gurgaon-549">Indian Grill Room</a><div cl
ass="restnt-loc ellipsis" data-w-onclick="stopClickPropagation|w1-restarant"><a href="/delhi-restaurants/suncit
y-business-tower-landmark">Suncity Business Tower,</a><a data-name="Golf Course Road" data-type="LocalityClick"
href="/delhi-restaurants/gurgaon/golf-course-road">Golf Course Road</a>, <a data-name="Gurgaon" data-type="Area
Click" href="/delhi-restaurants/gurgaon">Gurgaon</a></div></div><div class="detail-info"><ul><li><span class="d
ouble-line-ellipsis"><span>₹ 2,200 for 2 (approx)</span><span> | </span><a data-w-onclick="stopClickPropagation
|w1-restarant" href="/delhi-restaurants/north-indian-cuisine">North Indian</a><span>, </span><a data-w-onclick=
"stopClickPropagation|w1-restarant" href="/delhi-restaurants/mughlai-cuisine">Mughlai</a></span></li><li class=
"ellipsis"></li></ul></div><div class="add-new-section" style="white-space: nowrap; overflow-x: auto;"><a analy
tics-action="RestTagClick" analytics-label="Dineout Pay" class="btn pay cursor" data-link="/dineout-pay/how-it-
works" data-w-onclick="sendAnalyticsCommon|w1-restarant" href="/dineout-pay/how-it-works" rel="noopener" style=
"color:#F67373;background:#FFF4F4" target="_blank">Dineout Pay<img class="lazy-load-img" data-src="https://im1.
dineout.co.in/images/uploads/misc/2019/Jan/17/information.png"/></a></div></div></div></div></div></div>
```

In [70]:
```python
restaurant_name=[]
cuisine=[]
location=[]
ratings=[]
images =[]
for x in soup7.find_all('div',{'class':"restnt-card restaurant"}):
    for y in x.find_all('a',{'class':"restnt-name ellipsis"}):
        restaurant_name.append(y.text)
    for z in x.find_all('span',{'class':"double-line-ellipsis"}):
        cuisine.append(z.text.split('|', 1)[1])
    for t in x.find_all('div',{'class':"restnt-loc ellipsis"}):
        location.append(t.text)
    for r in x.find_all('div',{'class':"restnt-rating rating-4"}):
        ratings.append(r.text)
    for img in x.find_all('img',{'class':'no-img'}):
        images.append(img['data-src'])
```

In [71]:
```python
print(len(restaurant_name),len(cuisine),len(location),len(ratings),len(images))
```

9 9 9 9 9

In [72]:
```python
cuisine
```

Out[72]:
```
[' Chinese, North Indian',
 ' North Indian, Asian, Italian',
 ' Italian, Continental',
 ' Chinese, North Indian',
 ' North Indian, Chinese',
 ' North Indian, Italian',
 ' North Indian',
 ' North Indian',
 ' North Indian, Mughlai']
```

In [73]:
```python
Dineout= pd.DataFrame(list(zip(restaurant_name,cuisine,location,ratings,images)), columns=['Restaurant Name','C
```

In [74]:
```python
def make_clickable(val):
    # target _blank to open new window
    return '<a target="_blank" href="{}">{}</a>'.format(val, val)

Dineout.style.format({'Images URL': make_clickable})
```

Out[74]:

	Restaurant Name	Cuisine	Location	Ratings	Images URL
0	Castle Barbeque	Chinese, North Indian	Connaught Place, Central Delhi	4	https://im1.dineout.co.in/images/uploads/restaurant/sharpen/8/k/b/p86792-16062953735fbe1f4d3fb7e.jpg?tr=tr:n-medium
1	Jungle Jamboree	North Indian, Asian, Italian	3CS Mall,Lajpat Nagar - 3, South Delhi	3.9	https://im1.dineout.co.in/images/uploads/restaurant/sharpen/5/p/m/p59633-166088382462ff137009010.jpg?tr=tr:n-medium
2	Cafe Knosh	Italian, Continental	The Leela Ambience Convention Hotel,Shahdara, East Delhi	4.3	https://im1.dineout.co.in/images/uploads/restaurant/sharpen/4/p/m/p406-15438184745c04ccea491bc.jpg?tr=tr:n-medium
3	Castle's Barbeque	Chinese, North Indian	Pacific Mall,Tagore Garden, West Delhi	3.9	https://im1.dineout.co.in/images/uploads/restaurant/sharpen/3/j/o/p38113-15959192065f1fcb666130c.jpg?tr=tr:n-medium
4	The Barbeque Company	North Indian, Chinese	Gardens Galleria,Sector 38A, Noida	3.9	https://im1.dineout.co.in/images/uploads/restaurant/sharpen/7/p/k/p79307-16051787755fad1597f2bf9.jpg?tr=tr:n-medium
5	India Grill	North Indian, Italian	Hilton Garden Inn,Saket, South Delhi	3.9	https://im1.dineout.co.in/images/uploads/restaurant/sharpen/2/v/t/p2687-1482477169585cce712b90f.jpg?tr=tr:n-medium
6	Delhi Barbeque	North Indian	Taurus Sarovar Portico,Mahipalpur, South Delhi	3.7	https://im1.dineout.co.in/images/uploads/restaurant/sharpen/5/d/i/p52501-1661855212630de5eceb6d2.jpg?tr=tr:n-medium
7	The Monarch - Bar Be Que Village	North Indian	Indirapuram Habitat Centre,Indirapuram, Ghaziabad	3.8	https://im1.dineout.co.in/images/uploads/restaurant/sharpen/3/n/o/p34822-15599107305cfa594a13c24.jpg?tr=tr:n-medium
8	Indian Grill Room	North Indian, Mughlai	Suncity Business Tower,Golf Course Road, Gurgaon	4.3	https://im1.dineout.co.in/images/uploads/restaurant/sharpen/5/y/f/p549-165000147262590640c0afc.jpg?tr=tr:n-medium

In [ ]: