Assignment 1

July 9, 2023

```
[1]: import requests
      from bs4 import BeautifulSoup
      import pandas as pd
[20]: page=requests.get('https://en.wikipedia.org/wiki/Main_Page')
      page
[20]: <Response [200]>
[124]:
      soup=BeautifulSoup(page.content,"html.parser")
[22]: header_tags = soup.find_all(["h1", "h2", "h3"])
      header_texts = [tag.text.strip() for tag in header_tags]
[23]:
[24]: df = pd.DataFrame({"Headers": header_texts})
      df
[24]:
                                Headers
                              Main Page
      0
                   Welcome to Wikipedia
      1
      2
         From today's featured article
      3
                       Did you knowÂă...
      4
                            In the news
      5
                            On this day
      6
               Today's featured picture
      7
               Other areas of Wikipedia
      8
            Wikipedia's sister projects
      9
                    Wikipedia languages
[29]: def scrape_odi_rankings():
           page=requests.get("https://www.icc-cricket.com/rankings/mens/team-rankings/
        odi")
           page
           soup = BeautifulSoup(page.text, 'html.parser')
           soup
```

```
table = soup.find('table', class_='table')
         rows = table.find_all('tr')
         data = []
         for row in rows[1:11]:
             cells = row.find_all('td')
             rank = cells[0].text.strip()
             team = cells[1].text.strip()
             matches = cells[2].text.strip()
             points = cells[3].text.strip()
             rating = cells[4].text.strip()
             data.append([rank, team, matches, points, rating])
         df = pd.DataFrame(data, columns=['Rank', 'Team', 'Matches', 'Points', |
      return df
     odi_rankings_df = scrape_odi_rankings()
     odi_rankings_df
[29]:
       Rank
                         Team Matches Points Rating
              Australia\nAUS
                                   23 2,714
                                               118
     1
              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
          6 South Africa\nSA
                                   19 1,910
     5
                                               101
     6
          7 Bangladesh\nBAN
                                   25 2,451
                                               98
     7
                                   28 2,378
                Sri Lanka\nSL
                                                85
     8
          9 Afghanistan\nAFG
                                   13 1,067
                                                82
         10
             West Indies\nWI
                                   32 2,201
                                                69
[30]: import requests
     from bs4 import BeautifulSoup
     import pandas as pd
     page =requests.get("https://www.icc-cricket.com/rankings/mens/player-rankings/
      →odi/batting")
     page
     soup = BeautifulSoup(response.content, "html.parser")
     soup
     table = soup.find("table", class_="table rankings-table")
```

```
player_names = []
      teams = []
      ratings = []
      rows = table.find_all("tr", class_="table-body")
      for row in rows[:10]: # Limit to the top 10 batsmen
          columns = row.find_all("td")
          player_name = columns[1].find("a").text.strip()
          team = columns[2].text.strip()
          rating = columns[3].text.strip()
          player_names.append(player_name)
          teams.append(team)
          ratings.append(rating)
      df = pd.DataFrame({"Player": player_names, "Team": teams, "Rating": ratings})
      df
[30]:
                        Player Team Rating
         Rassie van der Dussen
                                 SA
                                       777
                  Fakhar Zaman PAK
                                       755
      1
      2
                   Imam-ul-Haq PAK
                                       745
                  Shubman Gill IND
      3
                                       738
      4
                  Harry Tector IRE
                                       726
      5
                  David Warner AUS
                                       726
                   Virat Kohli IND
      6
                                       719
      7
               Quinton de Kock SA
                                       718
                  Rohit Sharma IND
                                       707
      9
                   Steve Smith AUS
                                       702
[31]: page = requests.get("https://www.icc-cricket.com/rankings/mens/player-rankings/
      →odi/bowling")
      page
      soup = BeautifulSoup(response.content, "html.parser")
      table = soup.find("table", class_="table rankings-table")
      player_names = []
      teams = []
      ratings = []
      rows = table.find_all("tr", class_="table-body")
      for row in rows[:10]: # Limit to the top 10 bowlers
          columns = row.find_all("td")
          player_name = columns[1].find("a").text.strip()
          team = columns[2].text.strip()
          rating = columns[3].text.strip()
          player_names.append(player_name)
```

```
teams.append(team)
         ratings.append(rating)
     df = pd.DataFrame({"Player": player_names, "Team": teams, "Rating": ratings})
     df
[31]:
                      Player Team Rating
        Rassie van der Dussen
                              SA
                                    777
     0
                Fakhar Zaman PAK
                                    755
     1
     2
                  Imam-ul-Haq PAK
                                    745
                Shubman Gill IND
     3
                                    738
     4
                Harry Tector IRE
                                    726
     5
                David Warner AUS
                                    726
                 Virat Kohli IND
     6
                                    719
     7
              Quinton de Kock SA
                                    718
                 Rohit Sharma IND
                                    707
     8
                 Steve Smith AUS
                                    702
     9
[33]: page =requests.get("https://www.icc-cricket.com/rankings/womens/team-rankings/
      odi")
     page
     soup = BeautifulSoup(response.content, "html.parser")
     table = soup.find("table", class_="table")
     team_names = []
     matches = []
     points = []
     ratings = []
     rows = table.find_all("tr", class_="table-body")
     for row in rows[:10]:
         columns = row.find_all("td")
         team_name = columns[1].text.strip()
         match = columns[2].text.strip()
         point = columns[3].text.strip()
         rating = columns[4].text.strip()
         team_names.append(team_name)
         matches.append(match)
         points.append(point)
         ratings.append(rating)
     →"Rating": ratings})
     df
```

```
[33]:
                     Team Matches Points Rating
             England\nENG
                               28 3,342
      0
                                             119
      1
        South Africa\nSA
                               26 3,098
                                             119
      2
               India\nIND
                               27 2,820
                                             104
      3
          New Zealand\nNZ
                               28 2,688
                                             96
      4
          West Indies\nWI
                               29 2,743
                                             95
      5
          Bangladesh\nBAN
                               14
                                     977
                                             70
            Sri Lanka\nSL
                                     820
      6
                               12
                                             68
      7
            Thailand\nTHA
                               12
                                     806
                                              67
      8
            Pakistan\nPAK
                               27 1,678
                                              62
      9
             Ireland\nIRE
                               16
                                     605
                                             38
[40]: page=requests.get("https://www.icc-cricket.com/rankings/womens/player-rankings/
       →odi/batting")
      page
      soup = BeautifulSoup(response.content, "html.parser")
      table = soup.find("table", class_="table rankings-table")
      player_names = []
      teams = \Pi
      ratings = []
      rows = table.find_all("tr", class_="table-body")
      for row in rows[:10]:
          columns = row.find_all("td")
          player_name = columns[1].find("a").text.strip()
          team = columns[2].text.strip()
          rating = columns[3].text.strip()
          player_names.append(player_name)
          teams.append(team)
          ratings.append(rating)
      df = pd.DataFrame({"Player": player_names, "Team": teams, "Rating": ratings})
      df
[40]:
                   Player Team Rating
      0
              Beth Mooney AUS
                                  754
          Laura Wolvaardt
                                  732
      1
                            SA
      2
           Natalie Sciver ENG
                                  731
                                  717
      3
              Meg Lanning AUS
      4 Harmanpreet Kaur IND
                                  716
      5
          Smriti Mandhana IND
                                  714
             Ellyse Perry
                           AUS
                                  626
      6
      7
          Stafanie Taylor
                            WI
                                  618
           Tammy Beaumont ENG
                                  595
```

```
[42]: page=requests.get("https://www.icc-cricket.com/rankings/womens/player-rankings/
      →odi/all-rounder")
      page
      soup = BeautifulSoup(response.content, "html.parser")
      table = soup.find("table", class_="table rankings-table")
      player_names = []
      teams = \Pi
      ratings = []
      rows = table.find_all("tr", class_="table-body")
      for row in rows[:10]:
          columns = row.find_all("td")
          player_name = columns[1].find("a").text.strip()
          team = columns[2].text.strip()
          rating = columns[3].text.strip()
          player_names.append(player_name)
          teams.append(team)
          ratings.append(rating)
      df = pd.DataFrame({"Player": player_names, "Team": teams, "Rating": ratings})
      df
[42]:
                    Player Team Rating
      0
            Natalie Sciver ENG
                                   371
      1
              Ellyse Perry AUS
                                   366
      2
                                   349
            Marizanne Kapp
                            SA
      3
                                   328
               Amelia Kerr NZ
             Deepti Sharma IND
      4
                                   322
      5
          Ashleigh Gardner AUS
                                   292
      6
             Jess Jonassen AUS
                                   250
      7
             Sophie Devine
                           NZ
                                   233
      8
                  Nida Dar PAK
                                   232
                                   205
        Sophie Ecclestone ENG
[61]: page=requests.get ("https://www.cnbc.com/world/?region=world")
      page
      soup = BeautifulSoup(response.content, "html.parser")
      headline_tags = soup.find_all("a", class_="Card-title")
      headlines = [tag.text.strip() for tag in headline_tags]
      df = pd.DataFrame({"Headline": headlines})
```

df

```
[61]:
                                                   Headline
          Earnings playbook: JPMorgan Chase and Delta Ai...
          June inflation data will be closely watched by ...
      1
          The Fed has rolled out a new index for gauging...
      2
      3
          Biogen shares fall after AlzheimerâĂŹs drug appr...
      4
          These stocks that are about to turn a profit s...
          Earnings playbook: JPMorgan Chase and Delta Ai...
      5
      6
          The Fed rolls out a new economic index that co...
         Micron and Pfizer are the most oversold S&P 50...
      7
          Active funds are powering JPMorgan's ETFs past...
      9
         Ukraine reports advances near eastern city of ...
         Wagner leader Prigozhin in St. Petersburg, Bel...
         Zelenskyy warns of provocations at nuclear pla...
      11
      12 Wagner's Prigozhin reportedly resurfaces; NATO...
      13 Russia's Medvedev cites risks of nuclear war; ...
      14
         'We are in uncharted territory': World records...
         Bad news for nervous flyers: Turbulence is get...
         World registers hottest day since records bega...
         Millions of workers face up to challenge of he...
      17
         El NiÃso has officially begun. UN says phenomen...
      19
         Southeast Asia's IPO market is an investor fav...
      20
         We the see biggest opportunities in Indonesia,...
      21
         Singapore pledged billions to fight climate ch...
         V3 Gourmet explains why it chose Singapore for...
         Revenues of 'warung' operators grew after they...
         The best places to eat in Andalusia âĂŤ from a c...
         What a 250,000 euro penthouse renovation in Ba...
      25
         Serving 'lunch' before midnight âĂŤ and other wa...
      26
         These workers take âĂŸhush trips.âĂŹ HereâĂŹs how th...
      27
      28 Michelin Guide adds 17 food stalls in Singapor...
      29 28-year-old social media manager in Norway is ...
      30 10 rules of ikigai, from authors of the Japane...
      31 5 low-stress summer jobs that are hiring right...
      32 Americans need to earn over $230,000 a year to...
      33 Bill Gates says Warren Buffett taught him how ...
[64]: page=requests.get ("https://www.cnbc.com/world/?region=world")
      soup = BeautifulSoup(response.content, "html.parser")
      time_tags = soup.find_all("time")
      times = [tag.text.strip() for tag in time_tags]
      df = pd.DataFrame({"Time": times})
```

```
df
[64]:
                  Time
      0
            47 Min Ago
      1
            47 Min Ago
      2
           47 Min Ago
      3
           1 Hour Ago
      4
           2 Hours Ago
      5
           2 Hours Ago
      6
           3 Hours Ago
      7
          4 Hours Ago
          4 Hours Ago
          10 Hours Ago
      9
      10 21 Hours Ago
      11
          July 8, 2023
      12 July 8, 2023
      13 July 8, 2023
      14 July 8, 2023
      15 July 8, 2023
      16 July 8, 2023
      17
         July 8, 2023
      18 July 8, 2023
      19 July 8, 2023
      20
         July 8, 2023
         July 8, 2023
      21
      22 July 7, 2023
         July 7, 2023
      23
      24 July 7, 2023
      25 July 7, 2023
      26 July 7, 2023
          July 7, 2023
      27
      28 July 7, 2023
         July 7, 2023
      29
[67]: page= requests.get("https://www.cnbc.com/world/?region=world")
      page
      soup = BeautifulSoup(response.content, "html.parser")
      link_tags = soup.find_all("a", class_="Card-title")
      news_links = [tag['href'] for tag in link_tags]
      df = pd.DataFrame({"News Link": news_links})
      df
[67]:
                                                  News Link
```

https://www.cnbc.com/2023/07/09/earnings-playb...

```
2
         https://www.cnbc.com/2023/07/08/the-fed-has-ro...
     3
         https://www.cnbc.com/2023/07/07/biogen-falls-a...
         https://www.cnbc.com/2023/07/09/these-stocks-t...
     4
     5
         https://www.cnbc.com/2023/07/09/earnings-playb...
         https://www.cnbc.com/2023/07/08/the-fed-has-ro...
     6
     7
         https://www.cnbc.com/2023/07/08/micron-and-pfi...
         https://www.cnbc.com/2023/07/08/active-funds-a...
     8
         https://www.cnbc.com/2023/07/07/ukraine-war-li...
     9
         https://www.cnbc.com/2023/07/06/ukraine-war-li...
     10
         https://www.cnbc.com/2023/07/05/ukraine-war-li...
     11
         https://www.cnbc.com/2023/07/04/russia-ukraine...
     13
         https://www.cnbc.com/2023/07/03/ukraine-war-li...
     14
         https://www.cnbc.com/2023/07/07/climate-world-...
         https://www.cnbc.com/2023/07/06/bad-news-for-n...
     15
     16 https://www.cnbc.com/2023/07/05/climate-crisis...
         https://www.cnbc.com/2023/07/05/as-planet-heat...
     17
         https://www.cnbc.com/2023/07/04/el-nio-un-says...
     18
         https://www.cnbc.com/2023/07/07/southeast-asia...
     20
         https://www.cnbc.com/video/2023/06/26/we-the-s...
         https://www.cnbc.com/2023/06/21/singapore-clim...
     21
         https://www.cnbc.com/video/2023/06/19/v3-gourm...
     22
     23
         https://www.cnbc.com/video/2023/06/12/bukalapa...
         https://www.cnbc.com/2023/07/06/the-best-place...
     24
     25
         https://www.cnbc.com/2023/06/26/real-estate-in...
         https://www.cnbc.com/2023/06/22/how-to-reduce-...
         https://www.cnbc.com/2023/06/20/hush-trips-her...
     27
         https://www.cnbc.com/2023/06/16/michelin-guide...
     28
     29
         https://www.cnbc.com/2023/07/09/how-a-norway-2...
     30 https://www.cnbc.com/2023/07/09/10-rules-of-ik...
         https://www.cnbc.com/2023/07/09/5-low-stress-s...
         https://www.cnbc.com/2023/07/09/salary-america...
     32
     33 https://www.cnbc.com/2023/07/09/bill-gates-say...
[71]: pages = requests.get("https://www.journals.elsevier.com/artificial-intelligence/
      →most-downloaded-articles")
     page
     soup = BeautifulSoup(response.content, "html.parser")
     article_tags = soup.find_all("h2", class_="js-article-title")
     article_titles = [tag.text.strip() for tag in article_tags]
     df = pd.DataFrame({"Paper Title": article_titles})
     df
```

https://www.cnbc.com/2023/07/07/june-inflation...

1

```
[71]: Empty DataFrame
     Columns: [Paper Title]
     Index: []
[72]: page = requests.get("https://www.journals.elsevier.com/artificial-intelligence/
      →most-downloaded-articles")
     page
     soup = BeautifulSoup(response.content, "html.parser")
     article_tags = soup.find_all("h2", class_="js-article-title")
     authors_list = []
     for article in article_tags:
         parent_div = article.find_next("div", class_="text-xs")
         author_tags = parent_div.find_all("span", class_="author")
         authors = [author.text.strip() for author in author_tags]
         authors_list.append(authors)
     flattened_authors = [author for sublist in authors_list for author in sublist]
     df = pd.DataFrame({"Authors": flattened_authors})
     df
[72]: Empty DataFrame
     Columns: [Authors]
     Index: []
[75]: page =requests.get ("https://www.journals.elsevier.com/artificial-intelligence/
     →most-downloaded-articles")
     page
     soup = BeautifulSoup(response.content, "html.parser")
     article_tags = soup.find_all("h2", class_="js-article-title")
     published_dates = []
     for article in article_tags:
         date_tag = article.find_next("span",__
      published_date = date_tag.text.strip()
         published_dates.append(published_date)
     df = pd.DataFrame({"Published Date": published_dates})
```

```
df
[75]: Empty DataFrame
      Columns: [Published Date]
      Index: []
[77]: page =requests.get ("https://www.journals.elsevier.com/artificial-intelligence/
      →most-downloaded-articles")
      page
      soup = BeautifulSoup(response.content, "html.parser")
      article_tags = soup.find_all("h2", class_="js-article-title")
      paper_urls = []
      for article in article_tags:
          link_tag = article.find_next("a", class_="result-list-title-link")
          paper_url = link_tag["href"]
          paper_urls.append(paper_url)
      df = pd.DataFrame({"Paper URL": paper_urls})
      df
[77]: Empty DataFrame
      Columns: [Paper URL]
      Index: []
[79]: page = requests.get ("https://www.dineout.co.in/delhi-restaurants")
      soup = BeautifulSoup(response.content, "html.parser")
      restaurant_tags = soup.find_all("a", class_="restnt-name ellipsis")
      restaurant_names = [tag.text.strip() for tag in restaurant_tags]
      df = pd.DataFrame({"Restaurant Name": restaurant_names})
      df
[79]:
                          Restaurant Name
                                    Local
      0
      1
                                  Tamasha
                         Ministry Of Beer
      2
      3
                              Station Bar
      4
                            My Bar Square
                           Warehouse Cafe
      5
                           Openhouse Cafe
      6
      7
                     Connaught Club House
```

```
8
                      Unplugged Courtyard
      9
                                  Berco's
      10
                        The Junkyard Cafe
      11
                            The G.T. Road
      12
                       Lord of the Drinks
      13
                              38 Barracks
      14
          Ardor 2.1 Restaurant and Lounge
      15
                                       QBA
      16
                              Cafe High 5
      17
                              Dasaprakash
      18
                       The Imperial Spice
      19
                       Cafe Delhi Heights
      20
               Somewhere Restaurant & Bar
[80]: page = requests.get ("https://www.dineout.co.in/delhi-restaurants")
      page
      soup = BeautifulSoup(response.content, "html.parser")
      cuisine_tags = soup.find_all("span", class_="double-line-ellipsis")
      cuisine_types = [tag.text.strip() for tag in cuisine_tags]
      df = pd.DataFrame({"Cuisine": cuisine_types})
      df
[80]:
                                                     Cuisine
          âCź 2,000 for 2 (approx) | North Indian, Asian, ...
      1
          âCź 2,000 for 2 (approx) | Continental, Asian, I...
      2
          âĆź 3,000 for 2 (approx) | North Indian, Contine...
      3
          âCź 1,100 for 2 (approx) | Italian, Chinese, Nor...
      4
          âĆź 2,000 for 2 (approx) | Finger Food, Chinese,...
          âĆź 2,500 for 2 (approx) | North Indian, Chinese...
      5
          âĆź 2,000 for 2 (approx) | North Indian, Asian, ...
      6
      7
          âĆź 1,800 for 2 (approx) | North Indian, Contine...
          âĆź 3,300 for 2 (approx) | North Indian, Italian...
      8
      9
                     âĆź 1,300 for 2 (approx) | Chinese, Thai
          âCź 2,100 for 2 (approx) | North Indian, Contine...
      10
      11
                      âĆź 2,000 for 2 (approx) | North Indian
      12
          âĆź 2,500 for 2 (approx) | Chinese, North Indian...
      13
          âCź 2,700 for 2 (approx) | North Indian, Chinese...
      14
          âĆź 2,000 for 2 (approx) | North Indian, Chinese...
         âĆź 2,100 for 2 (approx) | North Indian, Contine...
         âCź 1,700 for 2 (approx) | North Indian, Contine...
          âĆź 800 for 2 (approx) | North Indian, South Ind...
         âĆź 3,000 for 2 (approx) | North Indian, Chinese...
      19 âĆź 1,300 for 2 (approx) | Continental, North In...
         âĆź 1,000 for 2 (approx) | North Indian, Contine...
```

```
[90]: page =requests.get ("https://www.dineout.co.in/delhi-restaurants")
      page
      soup = BeautifulSoup(response.content, "html.parser")
      location_tags = soup.find_all("div", class_="restnt-loc ellipsis")
      locations = [tag.text.strip() for tag in location_tags]
      df = pd.DataFrame({"Location": locations})
      df
[90]:
                                               Location
          Scindia House, Connaught Place, Central Delhi
      1
                        Connaught Place, Central Delhi
      2
                M-Block, Connaught Place, Central Delhi
      3
                F-Block, Connaught Place, Central Delhi
      4
                        Connaught Place, Central Delhi
      5
                        Connaught Place, Central Delhi
      6
                        Connaught Place, Central Delhi
      7
                        Connaught Place, Central Delhi
      8
                        Connaught Place, Central Delhi
                        Connaught Place, Central Delhi
      9
      10
                        Connaught Place, Central Delhi
                M-Block, Connaught Place, Central Delhi
      11
      12
                        Connaught Place, Central Delhi
      13
                M-Block, Connaught Place, Central Delhi
                        Connaught Place, Central Delhi
      14
      15
                        Connaught Place, Central Delhi
                        Connaught Place, Central Delhi
      16
      17
                        Connaught Place, Central Delhi
                M-Block, Connaught Place, Central Delhi
      18
      19
                                 Janpath, Central Delhi
      20
                        Connaught Place, Central Delhi
[94]: page =requests.get ("https://www.dineout.co.in/delhi-restaurants")
      page
      soup = BeautifulSoup(response.content, "html.parser")
      rating_tags = soup.find_all("div", class_="restnt-rating rating-4")
      ratings = [tag.text.strip() for tag in rating_tags]
      df = pd.DataFrame({"Rating": ratings})
      df
```

[94]:

0

Rating

```
1
             4.2
       2
               4
       3
               4
       4
             3.9
       5
             4.1
       6
             4.1
       7
             4.2
       8
               4
       9
             4.3
       10
             4.1
             4.3
       11
       12
             4.2
       13
             4.3
             4.1
       14
       15
             4.2
               4
       16
       17
             4.2
       18
             4.4
       19
             4.3
       20
             4.1
      pages =requests.get ("https://www.dineout.co.in/delhi-restaurants")
       pages
       soup = BeautifulSoup(response.content, "html.parser")
       images = []
       for i in soup.find_all("img",class_="no-img"):
           images.append(i.get('data-src'))
       images
       df = pd.DataFrame({"images": images})
[123]:
                                                       images
           https://im1.dineout.co.in/images/uploads/resta...
       0
       1
           https://im1.dineout.co.in/images/uploads/resta...
       2
           https://im1.dineout.co.in/images/uploads/resta...
       3
           https://im1.dineout.co.in/images/uploads/resta...
       4
           https://im1.dineout.co.in/images/uploads/resta...
       5
           https://im1.dineout.co.in/images/uploads/resta...
       6
           https://im1.dineout.co.in/images/uploads/resta...
       7
           https://im1.dineout.co.in/images/uploads/resta...
       8
           https://im1.dineout.co.in/images/uploads/resta...
       9
           https://im1.dineout.co.in/images/uploads/resta...
       10
          https://im1.dineout.co.in/images/uploads/resta...
       11
          https://im1.dineout.co.in/images/uploads/resta...
          https://im1.dineout.co.in/images/uploads/resta...
       12
          https://im1.dineout.co.in/images/uploads/resta...
       13
          https://im1.dineout.co.in/images/uploads/resta...
```

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15 https://im1.dineout.co.in/images/uploads/resta...
16 https://im1.dineout.co.in/images/uploads/resta...
17 https://im1.dineout.co.in/images/uploads/resta...
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20 https://im1.dineout.co.in/images/uploads/resta...

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