In [1]: !pip install bs4 !pip install requests Requirement already satisfied: bs4 in c:\users\admin\anaconda3\lib\site-packages (0.0.1) Requirement already satisfied: beautifulsoup4 in c:\users\admin\anaconda3\lib\site-packages (from bs4) (4.11.1) Requirement already satisfied: soupsieve>1.2 in c:\users\admin\anaconda3\lib\site-packages (from beautifulsoup4->bs4) (2.3.2.post1) Requirement already satisfied: requests in c:\users\admin\anaconda3\lib\site-packages (2.28.1) Requirement already satisfied: idna<4,>=2.5 in c:\users\admin\anaconda3\lib\site-packages (from requests) (3.4) Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\admin\anaconda3\lib\site-packages (from requests) (1.26.14) Requirement already satisfied: certifi>=2017.4.17 in c:\users\admin\anaconda3\lib\site-packages (from requests) (2022.12.7) Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\admin\anaconda3\lib\site-packages (from requests) (2.0.4) In [2]: **from** bs4 **import** BeautifulSoup import requests page = requests.get('https://en.wikipedia.org/wiki/Main_Page') In [4]: page <Response [200]> Out[4]: headline = [] In [19]: for i in soup.find_all('span', class_="mw-headline"): headline.append(i.text) headline ['Welcome to Wikipedia', Out[19]: "From today's featured article", 'Did you know\xa0...', 'In the news', 'On this day', "Today's featured picture", 'Other areas of Wikipedia', "Wikipedia's sister projects", 'Wikipedia languages'] In [21]: **import** pandas **as** pd df = pd.DataFrame({'Headline':headline}) Headline Out[21]: Welcome to Wikipedia 1 From today's featured article 2 Did you know ... 3 In the news 4 On this day 5 Today's featured picture Other areas of Wikipedia 6 Wikipedia's sister projects 7 8 Wikipedia languages page = requests.get('https://www.icc-cricket.com/rankings/womens/player-rankings/odi') page In [40]: <Response [200]> Out[40]: In [15]: **import** requests from bs4 import BeautifulSoup import pandas as pd url = "https://www.icc-cricket.com/rankings/mens/team-rankings/odi" response = requests.get(url) soup = BeautifulSoup(response.content, "html.parser") team_data = [] table = soup.find("table", class_="table") rows = table.find_all("tr") for row in rows[1:11]: cells = row.find_all("td") team = cells[1].text.strip() matches = cells[2].text.strip() points = cells[3].text.strip() rating = cells[4].text.strip() team_data.append([team, matches, points, rating]) df = pd.DataFrame(team_data, columns=["Team", "Matches", "Points", "Rating"]) print(df) Team Matches Points Rating 0 India\nIND 55 6,640 121 Australia\nAUS 42 4,926 1 117 South Africa\nSA 34 3,750 110 Pakistan\nPAK 36 3,922 109 New Zealand\nNZ 43 4,399 102 England\nENG 38 3,777 99 Sri Lanka\nSL 47 4,134 88 Bangladesh\nBAN 44 3,836 87 Afghanistan\nAFG 30 2,533 84 West Indies\nWI 38 2,582 68 In [16]: url = "https://www.icc-cricket.com/rankings/mens/player-rankings/odi/batting" response = requests.get(url) soup = BeautifulSoup(response.content, "html.parser") batsman_data = [] table = soup.find("table", class_="table") rows = table.find_all("tr") for row in rows[1:11]: cells = row.find_all("td") batsman = cells[1].text.strip() team = cells[2].text.strip() rating = cells[3].text.strip() batsman_data.append([batsman, team, rating]) df = pd.DataFrame(batsman_data, columns=["Batsman", "Team", "Rating"]) print(df) Batsman Team Rating 0 Shubman Gill IND 826 1 Babar Azam PAK 824 2 Virat Kohli IND 791 3 Rohit Sharma IND 769 4 Quinton de Kock SA 760 Daryl Mitchell NZ 750 David Warner AUS 745 6 7 Rassie van der Dussen SA 735 Harry Tector IRE 729 8 9 Dawid Malan ENG 729 In [17]: url = "https://www.icc-cricket.com/rankings/mens/player-rankings/odi/bowling" response = requests.get(url) soup = BeautifulSoup(response.content, "html.parser") bowler_data = [] table = soup.find("table", class_="table") rows = table.find_all("tr") for row in rows[1:11]: cells = row.find_all("td") bowler = cells[1].text.strip() team = cells[2].text.strip() rating = cells[3].text.strip() bowler_data.append([bowler, team, rating]) df = pd.DataFrame(bowler_data, columns=["Bowler", "Team", "Rating"]) print(df) Bowler Team Rating 0 Keshav Maharaj SA 741 Josh Hazlewood AUS 703 1 2 Mohammed Siraj IND 699 Jasprit Bumrah IND 685 Adam Zampa AUS 675 Rashid Khan AFG 667 Kuldeep Yadav IND 667 Trent Boult NZ 663 8 Shaheen Afridi PAK 650 Mohammad Shami IND 648 In [18]: **import** requests from bs4 import BeautifulSoup In [19]: page = requests.get('https://www.dineout.co.in/delhi-restaurants/buffet-special') page <Response [200]> Out[19]: restaurants = soup.find('div',class_="restnt-info cursor") In [21]: restaurants.text restaurants = [] for i in soup.find_all('div', class_="restnt-info cursor"): restaurants.append(i.text) restaurants ['Castle BarbequeConnaught Place, Central Delhi', Out[21]: 'Cafe KnoshThe Leela Ambience Convention Hotel, Shahdara, East Delhi', 'India GrillHilton Garden Inn, Saket, South Delhi', 'The Barbeque CompanyGardens Galleria, Sector 38A, Noida', 'Delhi BarbequeTaurus Sarovar Portico, Mahipalpur, South Delhi', 'The Monarch - Bar Be Que VillageIndirapuram Habitat Centre,Indirapuram, Ghaziabad', 'The Barbeque TimesM2K Corporate Park, Sector 51, Gurgaon'] In [22]: cuisine = [] for i in soup.find_all('span', class_="double-line-ellipsis"): cuisine.append(i.text) cuisine ['₹ 2,000 for 2 (approx) | Chinese, North Indian', Out[22]: '₹ 3,000 for 2 (approx) | Italian, Continental', '₹ 2,400 for 2 (approx) | North Indian, Italian', '₹ 1,700 for 2 (approx) | North Indian, Chinese', '₹ 1,800 for 2 (approx) | North Indian', '₹ 1,900 for 2 (approx) | North Indian', '₹ 1,500 for 2 (approx) | North Indian, Continental, Chinese, South Indian'] loc = soup.find('div',class_="restnt-loc ellipsis") loc loc.text 'Connaught Place, Central Delhi' Out[23]: In [24]: location = [] for i in soup.find_all('div', class_="restnt-loc ellipsis"): location.append(i.text) location ['Connaught Place, Central Delhi', 'The Leela Ambience Convention Hotel, Shahdara, East Delhi', 'Hilton Garden Inn, Saket, South Delhi', 'Gardens Galleria, Sector 38A, Noida', 'Taurus Sarovar Portico, Mahipalpur, South Delhi', 'Indirapuram Habitat Centre, Indirapuram, Ghaziabad', 'M2K Corporate Park, Sector 51, Gurgaon'] In [25]: images = [] for i in soup.find_all('img', class_="no-img"): images.append(i['data-src']) images ['https://im1.dineout.co.in/images/uploads/restaurant/sharpen/8/k/b/p86792-16062953735fbe1f4d3fb7e.jpg?tr=tr:n-medium', Out[25]: https://im1.dineout.co.in/images/uploads/restaurant/sharpen/4/p/m/p406-15438184745c04ccea491bc.jpg?tr=tr:n-medium', https://im1.dineout.co.in/images/uploads/restaurant/sharpen/2/q/t/p2687-169589385765154961ea87c.jpg?tr=tr:n-medium', https://im1.dineout.co.in/images/uploads/restaurant/sharpen/7/p/k/p79307-16051787755fad1597f2bf9.jpg?tr=tr:n-medium', 'https://im1.dineout.co.in/images/uploads/restaurant/sharpen/5/d/i/p52501-1661855212630de5eceb6d2.jpg?tr=tr:n-medium', 'https://im1.dineout.co.in/images/uploads/restaurant/sharpen/3/n/o/p34822-15599107305cfa594a13c24.jpg?tr=tr:n-medium', 'https://im1.dineout.co.in/images/uploads/restaurant/sharpen/1/u/r/p106428-166073786162fcd945925a9.jpg?tr=tr:n-medium'] In [26]: ratings = [] for i in soup.find_all('div', class_="restnt-rating rating-4"): ratings.append(i.text) ratings ['4', '4.3', '3.9', '3.9', '3.7', '3.8', '4.1'] Out[26]: import pandas as pd df = pd.DataFrame({'Restaurants':restaurants,'Location':location,'Cuisine':cuisine,'Images_url':images,'Ratings':rating,}) df Images_url Ratings Out[29]: Restaurants Location Cuisine Castle BarbequeConnaught Place, Central Delhi Connaught Place, Central Delhi ₹ 2,000 for 2 (approx) | Chinese, North Indian https://im1.dineout.co.in/images/uploads/resta... 648 1 Cafe KnoshThe Leela Ambience Convention Hotel,... The Leela Ambience Convention Hotel,Shahdara, ... ₹ 3,000 for 2 (approx) | Italian, Continental https://im1.dineout.co.in/images/uploads/resta... 648 Hilton Garden Inn, Saket, South Delhi India GrillHilton Garden Inn, Saket, South Delhi ₹ 2,400 for 2 (approx) | North Indian, Italian https://im1.dineout.co.in/images/uploads/resta... 648 ₹ 1,700 for 2 (approx) | North Indian, Chinese https://im1.dineout.co.in/images/uploads/resta... 3 The Barbeque CompanyGardens Galleria, Sector 38... Gardens Galleria, Sector 38A, Noida 648 Delhi BarbequeTaurus Sarovar Portico, Mahipalpu... Taurus Sarovar Portico, Mahipalpur, South Delhi ₹ 1,800 for 2 (approx) | North Indian https://im1.dineout.co.in/images/uploads/resta... 648 The Monarch - Bar Be Que VillageIndirapuram Ha... Indirapuram Habitat Centre,Indirapuram, Ghaziabad ₹ 1,900 for 2 (approx) | North Indian https://im1.dineout.co.in/images/uploads/resta... 648 6 The Barbeque TimesM2K Corporate Park, Sector 51... M2K Corporate Park, Sector 51, Gurgaon ₹ 1,500 for 2 (approx) | North Indian, Contine... https://im1.dineout.co.in/images/uploads/resta... 648 In [45]: import requests from bs4 import BeautifulSoup page = requests.get('https://www.cnbc.com/world/?region=world') page <Response [200]> Out[45]: headlines = [] In [31]: for i in soup.find_all('div', class_="RiverPlusCard-container"): headlines.append(i.text) headlines ["John Kerry responds to COP28 president's claim there's 'no science' behind fossil fuel phase outan hour ago•Sam Meredith", Out[31]: 'Here's what the S&P 500's summer hot streak can teach us about the late 2023 rallyMichael Santoli', 'Israel faces growing US calls for restraint amid renewed Gaza fighting', 'Three reasons a strong Black Friday weekend may not mean a blowout holiday season for retailers4 hours ago•Melissa Repko', 'A major CEO backer of the remote office model concedes one big work from home failure2 hours ago•Deborah Kong', 'These tenbagger stocks are well liked by analysts and may rally even more4 hours ago•Lisa Kailai Han', "This habit helped Bill Gates change careers after Microsoft—despite his being 'very monomaniacal'3 hours ago•Megan Sauer", "'Foreign terrorists' behind deadly Philippine bombing — officials", "One dead, two injured after man attacks tourists near Paris' Eiffel Tower" "This is how some of 2023's biggest AI winners have performed a year after ChatGPT's launchSamantha Subin", "Vice President Harris says 'too many innocent Palestinians have been killed' as fighting intensifies", 'Signs of a sector rotation — plus 2 more themes to watch in the stock market Zev Fima', "U.S. lays out plan at COP 28 to slash climate 'super pollutant' methane from oil and gas", 'Case for gold fever: NewEdge Wealth sees record rush intensifying Meredith Mutter', 'Uber shares pop on inclusion in S&P 500Jordan Novet, Ari Levy', "China's respiratory illness rise due to known pathogens - official", 'Inside Apple's chip lab, home to the most 'profound change' at the company in decadesKatie Tarasov', 'North Korea says interference in its satellites would be declaration of war'] In [32]: times = [] for i in soup.find_all('time', class_="LatestNews-timestamp"): times.append(i.text) times ['13 Min Ago', Out[32]: '1 Hour Ago', '1 Hour Ago', '2 Hours Ago', '2 Hours Ago', '3 Hours Ago', '4 Hours Ago', '4 Hours Ago', '4 Hours Ago', '9 Hours Ago', '21 Hours Ago' 'December 2, 2023' 'December 2, 2023', 'December 2, 2023'] In [33]: links = [] for i in soup.find_all('a', href="https://www.cnbc.com/2023/12/03/how-reading-helped-bill-gates-change-careers-after-microsoft.html"): links.append(i.text) links ['This habit helped Bill Gates change careers after retiring from Microsoft', Out[33]: "This habit helped Bill Gates change careers after Microsoft—despite his being 'very monomaniacal'", 'This habit helped Bill Gates change careers after retiring from Microsoft'] In [34]: import pandas as pd df = pd.DataFrame({'Times':times}) df Out[34]: Times 0 13 Min Ago 1 1 Hour Ago 2 1 Hour Ago 2 Hours Ago 2 Hours Ago 3 Hours Ago 6 3 Hours Ago 3 Hours Ago 8 3 Hours Ago 9 3 Hours Ago 10 4 Hours Ago 11 4 Hours Ago 12 4 Hours Ago 13 9 Hours Ago 14 21 Hours Ago **15** December 2, 2023 **16** December 2, 2023 **17** December 2, 2023 **18** December 2, 2023 **19** December 2, 2023 **20** December 2, 2023 21 December 2, 2023 **22** December 2, 2023 23 December 2, 2023 24 December 2, 2023 25 December 2, 2023 **26** December 2, 2023 27 December 2, 2023 28 December 2, 2023 29 December 2, 2023 In [37]: import requests from bs4 import BeautifulSoup import pandas as pd In [46]: url = "https://www.journals.elsevier.com/artificial-intelligence/most-downloaded-articles" response = requests.get(url) In [40]: titles = [] for i in soup.find_all('h2',class_="sc-1qrq3sd-1 gRGSUS sc-1nmom32-0 sc-1nmom32-1 btcbYu goSKRg"): titles.append(i.text) titles ['Reward is enough', Out[40]: 'Explanation in artificial intelligence: Insights from the social sciences', 'Creativity and artificial intelligence', 'Conflict-based search for optimal multi-agent pathfinding', 'Knowledge graphs as tools for explainable machine learning: A survey', 'Law and logic: A review from an argumentation perspective', 'Between MDPs and semi-MDPs: A framework for temporal abstraction in reinforcement learning', 'Explaining individual predictions when features are dependent: More accurate approximations to Shapley values', 'Multiple object tracking: A literature review', 'A survey of inverse reinforcement learning: Challenges, methods and progress', 'Evaluating XAI: A comparison of rule-based and example-based explanations', 'Explainable AI tools for legal reasoning about cases: A study on the European Court of Human Rights', 'Hard choices in artificial intelligence', 'Assessing the communication gap between AI models and healthcare professionals: Explainability, utility and trust in AI-driven clinical decision-making', 'Explaining black-box classifiers using post-hoc explanations-by-example: The effect of explanations and error-rates in XAI user studies', 'The Hanabi challenge: A new frontier for AI research', 'Wrappers for feature subset selection', 'Artificial cognition for social human-robot interaction: An implementation', 'A review of possible effects of cognitive biases on interpretation of rule-based machine learning models', 'The multifaceted impact of Ada Lovelace in the digital age', 'Robot ethics: Mapping the issues for a mechanized world', 'Reward (Mis)design for autonomous driving', 'Planning and acting in partially observable stochastic domains', 'What do we want from Explainable Artificial Intelligence (XAI)? - A stakeholder perspective on XAI and a conceptual model guiding interdisciplinary XAI research'] In [41]: authors = [] for i in soup.find_all('span', class_="sc-1w3fpd7-0 dnCnA0"): authors.append(i.text) authors ['David Silver, Satinder Singh, Doina Precup, Richard S. Sutton ', Out[41]: 'Tim Miller ' 'Margaret A. Boden ', 'Guni Sharon, Roni Stern, Ariel Felner, Nathan R. Sturtevant ', 'Ilaria Tiddi, Stefan Schlobach ', 'Henry Prakken, Giovanni Sartor', 'Richard S. Sutton, Doina Precup, Satinder Singh', 'Kjersti Aas, Martin Jullum, Anders Løland ', 'Wenhan Luo, Junliang Xing and 4 more', 'Saurabh Arora, Prashant Doshi', 'Jasper van der Waa, Elisabeth Nieuwburg, Anita Cremers, Mark Neerincx ', 'Joe Collenette, Katie Atkinson, Trevor Bench-Capon ', 'Roel Dobbe, Thomas Krendl Gilbert, Yonatan Mintz', 'Oskar Wysocki, Jessica Katharine Davies and 5 more', 'Eoin M. Kenny, Courtney Ford, Molly Quinn, Mark T. Keane ', 'Nolan Bard, Jakob N. Foerster and 13 more', 'Ron Kohavi, George H. John ', 'Séverin Lemaignan, Mathieu Warnier and 3 more', 'Tomáš Kliegr, Štěpán Bahník, Johannes Fürnkranz ', 'Luigia Carlucci Aiello ', 'Patrick Lin, Keith Abney, George Bekey', 'W. Bradley Knox, Alessandro Allievi and 3 more', 'Leslie Pack Kaelbling, Michael L. Littman, Anthony R. Cassandra ', 'Markus Langer, Daniel Oster and 6 more'] published_date = [] In [42]: for i in soup.find_all('span', class_="sc-1thf9ly-2 dvggWt"): published_date.append(i.text) published_date ['October 2021', Out[42]: 'February 2019', 'August 1998', 'February 2015', 'January 2022', 'October 2015', 'August 1999', 'September 2021', 'April 2021', 'August 2021', 'February 2021', 'April 2023', 'November 2021', 'March 2023', 'May 2021', 'March 2020' 'December 1997', 'June 2017', 'June 2021', 'June 2016', 'April 2011' 'March 2023', 'May 1998', 'July 2021'] In [44]: **import** pandas **as** pd df = pd.DataFrame({'Titles':titles,'Authors':authors,'Publishes_date':published_date}) df Authors Publishes date **Titles** Out[44]: 0 David Silver, Satinder Singh, Doina Precup, Ri... October 2021 Reward is enough 1 Explanation in artificial intelligence: Insigh... Tim Miller February 2019 2 Creativity and artificial intelligence Margaret A. Boden August 1998 Conflict-based search for optimal multi-agent \dots 3 Guni Sharon, Roni Stern, Ariel Felner, Nathan ... February 2015 Ilaria Tiddi, Stefan Schlobach 4 Knowledge graphs as tools for explainable mach... January 2022 5 Law and logic: A review from an argumentation ... Henry Prakken, Giovanni Sartor October 2015 Between MDPs and semi-MDPs: A framework for te... Richard S. Sutton, Doina Precup, Satinder Singh August 1999 Explaining individual predictions when feature... Kjersti Aas, Martin Jullum, Anders Løland September 2021 Multiple object tracking: A literature review Wenhan Luo, Junliang Xing and 4 more 8 April 2021 Saurabh Arora, Prashant Doshi 9 A survey of inverse reinforcement learning: Ch... August 2021 10 Evaluating XAI: A comparison of rule-based and... Jasper van der Waa, Elisabeth Nieuwburg, Anita... February 2021 11 Explainable AI tools for legal reasoning about... April 2023 Joe Collenette, Katie Atkinson, Trevor Bench-C.. 12 Hard choices in artificial intelligence Roel Dobbe, Thomas Krendl Gilbert, Yonatan Mintz November 2021 Assessing the communication gap between AI mod... 13 Oskar Wysocki, Jessica Katharine Davies and 5... March 2023 Explaining black-box classifiers using post-ho... 14 Eoin M. Kenny, Courtney Ford, Molly Quinn, Mar... May 2021 15 The Hanabi challenge: A new frontier for AI re... Nolan Bard, Jakob N. Foerster and 13 more March 2020 16 Wrappers for feature subset selection Ron Kohavi, George H. John December 1997 17 Séverin Lemaignan, Mathieu Warnier and 3 more Artificial cognition for social human–robot in... June 2017 18 Tomáš Kliegr, Štěpán Bahník, Johannes Fürnkranz A review of possible effects of cognitive bias... June 2021 19 June 2016 The multifaceted impact of Ada Lovelace in the.. Luigia Carlucci Aiello 20 Patrick Lin, Keith Abney, George Bekey Robot ethics: Mapping the issues for a mechani... April 2011 21 W. Bradley Knox, Alessandro Allievi and 3 more March 2023 Reward (Mis)design for autonomous driving 22 Leslie Pack Kaelbling, Michael L. Littman, Ant... Planning and acting in partially observable st... May 1998 23 What do we want from Explainable Artificial In... Markus Langer, Daniel Oster and 6 more July 2021