```
In [109]: import selenium
          from selenium import webdriver
          import time
          import warnings
          warnings.filterwarnings('ignore')
          from selenium.webdriver.common.by import By
          from bs4 import BeautifulSoup
          import requests
          import pandas as pd
          #importing required exceptions
          from \ selenium.common.exceptions \ import \ Stale Element Reference Exception \ , \ No Such Element Exception
          from selenium.webdriver.support.ui import WebDriverWait
          from selenium.webdriver.support import expected_conditions as EC
 In [ ]:
In [112]: driver = webdriver.Chrome()
 In [ ]: '''Q1) Scrape the details of most viewed videos on YouTube from Wikipedia. Url
          = https://en.wikipedia.org/wiki/List of most-viewed YouTube videos You need to find following details: A)
          Rank
          B) Name
          C) Artist
          D) Upload date
          E) Views '''
 In [9]: driver.get('https://en.wikipedia.org/wiki/List_of_most-viewed_YouTube_videos')
In [10]: video_name = []
          Name = driver.find_elements(By.XPATH , '//table[@class="sortable wikitable sticky-header static-row-numbers sort-under col3center col4right jquery-tablesorter"]/tbody/tr/td[1]
          for name in Name :
              NAME = name.text
              video_name.append(NAME)
          len(video_name)
Out[10]: 30
In [21]: Artist_Name = []
          artist = driver.find elements(By.XPATH , '//table[@class="sortable wikitable sticky-header static-row-numbers sort-under col3center col4right jquery-tablesorter"]/tbody/tr/td[
          for art in artist :
              artst = art.text
              Artist Name.append(artst)
          len(Artist_Name)
Out[21]: 30
```

```
In [24]:
    details = {
        'VIDEO NAME' : video_name ,
        'ARTIST NAME' : Artist_Name ,
        'UPLOAD DATE' : Upload_Date ,
        'VIEWS' : Views
    }
    df = pd.DataFrame(details)
    df['RANK'] = range(1, len(df) + 1)
    df.set_index('RANK', inplace=True)
    df
```

Out[24]:

	VIDEO NAME ARTIST NAME		UPLOAD DATE	VIEWS
RANK				
1	"Baby Shark Dance"[6]	Pinkfong Baby Shark - Kids' Songs & Stories	June 17, 2016	14.09
2	"Despacito"[9]	Luis Fonsi	January 12, 2017	8.38
3	"Johny Johny Yes Papa"[17]	LooLoo Kids - Nursery Rhymes and Children's Songs	October 8, 2016	6.87
4	"Bath Song"[18]	Cocomelon - Nursery Rhymes	May 2, 2018	6.62
5	"Shape of You"[19]	Ed Sheeran	January 30, 2017	6.20
6	"See You Again"[22]	Wiz Khalifa	April 6, 2015	6.17
7	"Wheels on the Bus"[27]	Cocomelon - Nursery Rhymes	May 24, 2018	5.88
8	"Phonics Song with Two Words"[28]	ChuChu TV Nursery Rhymes & Kids Songs	March 6, 2014	5.70
9	"Uptown Funk"[29]	Mark Ronson	November 19, 2014	5.15
10	"Learning Colors – Colorful Eggs on a Farm"[30]	Miroshka TV	February 27, 2018	5.07
11	"Gangnam Style"[31]	Psy	July 15, 2012	5.05
12	"Masha and the Bear – Recipe for Disaster"[36]	Get Movies	January 31, 2012	4.58
13	"Dame Tu Cosita"[37]	Ultra Records	April 5, 2018	4.55
14	"Axel F"[38]	Crazy Frog	June 16, 2009	4.34
15	"Sugar"[39]	Maroon 5	January 14, 2015	4.00
16	"Counting Stars"[40]	OneRepublic	May 31, 2013	3.97
17	"Baa Baa Black Sheep"[41]	Cocomelon - Nursery Rhymes	June 25, 2018	3.96
18	"Roar"[42]	Katy Perry	September 5, 2013	3.96
19	"Lakdi Ki Kathi"[43]	Jingle Toons	June 14, 2018	3.91
20	"Waka Waka (This Time for Africa)"[44]	Shakira	June 4, 2010	3.85
21	"Sorry"[45]	Justin Bieber	October 22, 2015	3.77
22	"Thinking Out Loud"[46]	Ed Sheeran	October 7, 2014	3.73
23	"Humpty the train on a fruits ride"[47]	Kiddiestv Hindi - Nursery Rhymes & Kids Songs	January 26, 2018	3.73
24	"Shree Hanuman Chalisa"[48]	T-Series Bhakti Sagar	May 10, 2011	3.69
25	"Dark Horse"[49]	Katy Perry	February 20, 2014	3.67
26	"Perfect"[50]	Ed Sheeran	November 9, 2017	3.67
27	"Let Her Go"[51]	Passenger	July 25, 2012	3.61
28	"Faded"[52]	Alan Walker	December 3, 2015	3.59
29	"Girls Like You"[53]	Maroon 5	May 31, 2018	3.56
30	"Lean On"[54]	Major Lazer Official	March 22, 2015	3.55

```
In [ ]: ''' Q2) Scrape the details team India's international fixtures from bcci.tv.
         Url = https://www.bcci.tv/.
         You need to find following details:
         A) Series
         B) Place
         C) Date
         D) Time
         Note: - From bcci.tv home page you have reach to the international fixture page through code.'''
In [26]: driver.get('https://www.bcci.tv/')
In [27]: search = driver.find element(By.XPATH , '/html/body/header/div[3]/div[2]/ul/div[1]/a[2]')
         search.click()
In [29]: Series = []
         series = driver.find_elements(By.XPATH , '//div[@class="match-info"]/h5')
         for ser in series :
             tour = ser.text
             Series.append(tour)
         len(Series)
Out[29]: 6
In [30]: Place = []
         venue = driver.find_elements(By.XPATH , '//div[@class="match-place ng-scope"]/span[2]')
         for i in venue :
             place = i.text
             Place.append(place)
         len(Place)
Out[30]: 6
In [31]: Stadium = []
         stad = driver.find_elements(By.XPATH , '//div[@class="match-place ng-scope"]/span[1]')
         for x in stad :
             stadium = x.text
             Stadium.append(stadium)
         len(Stadium)
Out[31]: 6
In [32]: Date = []
         date = driver.find_elements(By.XPATH , '//div[@class="match-date-info"]/div[1]')
         for tarikh in date :
             a = tarikh.text
             Date.append(a)
         len(Date)
Out[32]: 6
In [33]: Time = []
         time = driver.find_elements(By.XPATH , '//div[@class="match-date-info"]/div[2]')
         for t in time :
             TIME = t.text
             Time.append(TIME)
         len(Time)
Out[33]: 6
```

```
In [34]: details = {
              'SERIES' : Series ,
              'STADIUM' : Stadium ,
              'PLACE' : Place ,
              'DATE' : Date ,
              'TIME' : Time
          df = pd.DataFrame(details)
         df
Out[34]:
                                  SERIES
                                                                     STADIUM
                                                                                 PLACE
                                                                                                DATE
                                                                                                           TIME
          0 ENGLAND TOUR OF INDIA 2023-24 Himachal Pradesh Cricket Association Stadium, Dharamsala
                                                                                        7 MARCH, 2024 9:30 AM IST
              INDIA TOUR OF ZIMBABWE 2024
                                                              Harare Sports Club,
                                                                                          6 JULY, 2024 8:00 PM IST
                                                                                  Harare
              INDIA TOUR OF ZIMBABWE 2024
                                                              Harare Sports Club,
                                                                                  Harare
                                                                                          7 JULY, 2024 8:00 PM IST
              INDIA TOUR OF ZIMBABWE 2024
                                                              Harare Sports Club,
                                                                                 Harare
                                                                                          10 JULY, 2024 8:00 PM IST
              INDIA TOUR OF ZIMBABWE 2024
                                                              Harare Sports Club,
                                                                                          13 JULY, 2024 8:00 PM IST
                                                                                  Harare
          5 INDIA TOUR OF ZIMBABWE 2024
                                                              Harare Sports Club,
                                                                                  Harare
                                                                                          14 JULY, 2024 8:00 PM IST
In [ ]: ''' Q3) Scrape the details of State-wise GDP of India from statisticstime.com.
         Url = http://statisticstimes.com/
         You have to find following details: A) Rank
         B) State
         C) GSDP(18-19)- at current prices
         D) GSDP(19-20)- at current prices
         E) Share(18-19)
         F) GDP($ billion)
         Note: - From statisticstimes home page you have to reach to economy page through code. '''
In [36]: driver.get('https://statisticstimes.com/')
In [39]: | economy_heading = driver.find_element(By.XPATH , '/html/body/div[2]/div[1]/div[2]/div[2]/button')
          economy_heading.click()
In [40]: search = driver.find_element(By.XPATH , '/html/body/div[2]/div[1]/div[2]/div[2]/div[3]')
          search.click()
In [41]: | gdp_state_search = driver.find_element(By.XPATH , '/html/body/div[2]/div[2]/div[2]/ul/li[1]/a')
          gdp state search.click()
In [ ]: |gdp_table = driver.find_element(By.CLASS_NAME, 'display.nowrap')
          Extracting the data from the table
          data = []
          for row in gdp_table.find_elements(By.TAG_NAME, 'tr')[1:]: # Skip the header row
              columns = row.find elements(By.TAG NAME, 'td')
              rank, state, gsdp_1819, gsdp_1920, share_1819, gdp_billion = [col.text.strip() for col in columns[0:6]]
              data.append([rank, state, gsdp_1819, gsdp_1920, share_1819, gdp_billion])
         Creating a DataFrame
          columns = ['Rank', 'State', 'GSDP(18-19) at current prices', 'GSDP(19-20) at current prices', 'Share(18-19)', 'GDP($ billion)']
          df = pd.DataFrame(data, columns=columns)
         Display the DataFrame
         print(df)
```

```
In [ ]: '''Q4) Scrape the details of trending repositories on Github.com.
         Url = https://github.com/
         You have to find the following details:
         A) Repository title
         B) Repository description
         C) Contributors count
         D) Language used '''
In [43]: driver.get('https://github.com/DravinMishra/MyCompleteProjects')
In [55]: repo = driver.find_element(By.XPATH , '/html/body/div[1]/div[4]/div/main/div/div[1]/div[1]/div/strong/a').text
         repo_description = driver.find_element(By.XPATH , '/html/body/div[1]/div[4]/div/main/turbo-frame/div/div/div[2]/div[2]/div/div[1]/div/div[1]').text
         print(repo description)
         language used = driver.find element(By.XPATH , '/html/body/div[1]/div[4]/div/main/turbo-frame/div/div/div[2]/div[2]/div[5]/div[0]').text
         print(language_used)
         MyCompleteProjects
         No description, website, or topics provided.
         JavaScript
         63.1%
         CSS
         14.7%
         SCSS
         10.9%
         HTML
         9.2%
         Python
         2.1%
In []: '''Q5) Scrape the details of top 100 songs on billiboard.com. Url = https://www.billboard.com/ You have to find the
         following details:
         A) Song name
         B) Artist name
         C) Last week rank
         D) Peak rank
         E) Weeks on board
          Note: - From the home page you have to click on the charts option then hot 100-page link through code'''
In [63]: driver.get('https://www.billboard.com/')
In [68]: # top 100 = driver.find element(By.XPATH , '/html/body/div[3]/main/div[1]/div[1]/div[1]/div[1]/div[2]/div[2]/a[3]')
         \#top\_100 = driver.find\_element(By.XPATH , '/html/body/div[3]/main/div[2]/div[1]/div[1]/div[1]/div[2]/div/div[2]/a[3]')
         top_200 = driver.find_element(By.XPATH , '/html/body/div[3]/main/div[2]/div[1]/div[1]/div[1]/div[2]/div[2]/a[1]')
         top 200.click()
In [73]: Song Name = []
         song = driver.find_elements(By.XPATH , '//div[@class="o-chart-results-list-row-container"]/ul/li[4]/ul/li/h3')
         for songs in song :
             Song_Name.append(songs.text)
         len(Song_Name)
Out[73]: 200
```

```
In [74]: Song_Name
Out[74]: ['Vultures 1',
           '2093',
           'One Thing At A Time',
           'Stick Season',
           'SOS',
           "1989 (Taylor's Version)",
           'Lover',
           'For All The Dogs',
           'Midnights',
           'American Dream',
           'Zach Bryan',
           'Dangerous: The Double Album',
           'The Highlights',
           'Utopia',
           'Folklore',
           '35 Biggest Hits',
           'Legend: The Best Of Bob Marley And The Wailers',
           'The Diamond Collection',
           'Hazbin Hotel, Season One',
           1 miles 10 1 ac 1
In [75]: Artist Name = []
         artist = driver.find_elements(By.XPATH , '//div[@class="o-chart-results-list-row-container"]/ul/li[4]/ul/li[1]/span')
         for artists in artist :
             Artist_Name.append(artists.text)
         len(Artist_Name)
Out[75]: 200
In [76]: Artist_Name
Out[76]: ['\$: Kanye West & Ty Dolla \$ign',
           'Yeat',
           'Morgan Wallen',
           'Noah Kahan',
           'SZA',
           'Taylor Swift',
           'Taylor Swift',
           'Drake',
           'Taylor Swift',
           '21 Savage',
           'Zach Bryan',
           'Morgan Wallen',
           'The Weeknd',
           'Travis Scott',
           'Taylor Swift',
           'Toby Keith',
           'Bob Marley And The Wailers',
           'Post Malone',
           'Soundtrack',
           Tata Manaal
In [82]: | tw_rank = []
         # D) Peak rank
         # E) Weeks on board
         rank_this = driver.find_elements(By.XPATH , '//div[@class="o-chart-results-list-row-container"]/ul/li[1]/span[1]')
         for rank in rank_this :
             tw_rank.append(rank.text)
         len(tw_rank)
Out[82]: 200
```

```
In [81]: last_week_rank = []
         lw rank = driver.find elements(By.XPATH , '//div[@class="o-chart-results-list-row-container"]/ul/li[4]/ul/li[4]/span')
         for rank in lw_rank :
             last_week_rank.append(rank.text)
         len(last_week_rank)
Out[81]: 200
In [79]: peak_rank = []
         p_rank = driver.find_elements(By.XPATH , '//div[@class="o-chart-results-list-row-container"]/ul/li[4]/ul/li[5]/span')
         for rank in p_rank :
             peak_rank.append(rank.text)
         len(peak_rank)
Out[79]: 200
In [80]: week_on_board = []
         wob = driver.find_elements(By.XPATH , '//div[@class="o-chart-results-list-row-container"]/ul/li[4]/ul/li[6]/span')
         for i in wob :
             week_on_board.append(i.text)
         len(week_on_board)
Out[80]: 200
In [84]: details = {
             'SONG NAME' : Song_Name ,
             'ARTIST NAME' : Artist_Name ,
             'THIS WEEK RANK' : tw rank ,
             'LAST WEEK RANK' : last_week_rank ,
             'PEAK RANK' : peak_rank ,
             'WEEK ON BOARD' : week_on_board
         df = pd.DataFrame(details)
         df
```

Out[84]:

	SONG NAME	ARTIST NAME	THIS WEEK RANK	LAST WEEK RANK	PEAK RANK	WEEK ON BOARD
0	Vultures 1	¥: Kanye West & Ty Dolla ign	1	1	1	2
1	2093	Yeat	2	-	2	1
2	One Thing At A Time	Morgan Wallen	3	4	1	51
3	Stick Season	Noah Kahan	4	3	3	65
4	SOS	SZA	5	5	1	63
195	Unorthodox Jukebox	Bruno Mars	196	177	1	232
196	Ultimate Sinatra	Frank Sinatra	197	159	32	153
197	Back In Black	AC/DC	198	-	4	594
198	Angel Face	Stephen Sanchez	199	-	90	3
199	Cottonwood 2	NLE Choppa	200	196	21	23

200 rows × 6 columns

```
In [ ]: '''Q6) Scrape the details of Highest selling novels.
         A) Book name
         B) Author name
         C) Volumes sold
         D) Publisher
         E) Genre
         Url - https://www.theguardian.com/news/datablog/2012/aug/09/best-selling-books-all-time-fifty-shades-grey-compare'''
In [87]: url = 'https://www.theguardian.com/news/datablog/2012/aug/09/best-selling-books-all-time-fifty-shades-grey-compare'
         driver.get(url)
In [89]: Book Name = []
         book = driver.find_elements(By.XPATH , '//table[@class="in-article sortable"]/tbody/tr/td[2]')
         for books in book:
             BOOK = books.text
             Book_Name.append(BOOK)
         len(Book_Name)
Out[89]: 100
In [90]: Author_Name = []
         name = driver.find_elements(By.XPATH , '//table[@class="in-article sortable"]/tbody/tr/td[3]')
         for author in name :
             names = author.text
             Author_Name.append(names)
         len(Author_Name)
Out[90]: 100
In [91]: volume_sold = []
         sales = driver.find_elements(By.XPATH , '//table[@class="in-article sortable"]/tbody/tr/td[4]')
         for sale in sales :
             volume sold.append(sale.text)
         len(volume_sold)
Out[91]: 100
In [92]: publisher = []
         publish = driver.find_elements(By.XPATH , '//table[@class="in-article sortable"]/tbody/tr/td[5]')
         for i in publish :
             publisher.append(i.text)
         len(publisher)
Out[92]: 100
In [93]: Genre = []
         genre = driver.find_elements(By.XPATH , '//table[@class="in-article sortable"]/tbody/tr/td[6]')
         for i in genre :
             Genre.append(i.text)
         len(Genre)
Out[93]: 100
```

```
In [94]: df = pd.DataFrame({
                'BOOK NAME' : Book Name ,
               'AUTHOR NAME' : Author_Name ,
               'VOLUME SALES' : volume_sold ,
               'PUBLISHER' : publisher ,
               'GENRE' : Genre
          })
          df
Out[94]:
                                            BOOK NAME AUTHOR NAME VOLUME SALES
                                                                                           PUBLISHER
                                                                                                                      GENRE
            0
                                                                              5,094,805
                                                                                            Transworld Crime, Thriller & Adventure
                                        Da Vinci Code, The
                                                             Brown, Dan
            1
                          Harry Potter and the Deathly Hallows
                                                            Rowling, J.K.
                                                                              4,475,152
                                                                                           Bloomsbury
                                                                                                               Children's Fiction
            2
                      Harry Potter and the Philosopher's Stone
                                                            Rowling, J.K.
                                                                              4,200,654
                                                                                           Bloomsbury
                                                                                                               Children's Fiction
                                                            Rowling, J.K.
            3
                      Harry Potter and the Order of the Phoenix
                                                                              4,179,479
                                                                                           Bloomsbury
                                                                                                               Children's Fiction
            4
                                       Fifty Shades of Grey
                                                                              3,758,936 Random House
                                                             James, E. L.
                                                                                                             Romance & Sagas
           95
                                               Ghost,The
                                                           Harris, Robert
                                                                                807,311 Random House
                                                                                                        General & Literary Fiction
           96
                             Happy Days with the Naked Chef
                                                            Oliver, Jamie
                                                                                794,201
                                                                                              Penguin
                                                                                                          Food & Drink: General
           97
                     Hunger Games, The: Hunger Games Trilogy Collins, Suzanne
                                                                                792,187
                                                                                         Scholastic Ltd.
                                                                                                             Young Adult Fiction
           98
                 Lost Boy, The: A Foster Child's Search for the L...
                                                            Pelzer, Dave
                                                                                791,507
                                                                                                Orion
                                                                                                             Biography: General
           99 Jamie's Ministry of Food:Anyone Can Learn to C...
                                                            Oliver, Jamie
                                                                                791,095
                                                                                              Penguin
                                                                                                          Food & Drink: General
          100 rows × 5 columns
In [ ]: ''' Q7)Scrape the details most watched tv series of all time from imdb.com.
          Url = https://www.imdb.com/list/ls512407256/ You have
          to find the following details:
          A) Name
          B) Year span
          C) Genre
          D) Run time
          E) Ratings
          F) Votes
In [96]: driver.get('https://www.imdb.com/list/ls512407256/')
In [97]: Name = []
          names = driver.find elements(By.XPATH , '//div[@class="lister-item-content"]/h3/a')
          for name in names :
               Name.append(name.text)
          len(Name)
Out[97]: 100
In [99]: Year_Span = []
          year = driver.find_elements(By.XPATH , '//div[@class="lister-item-content"]/h3/span[2]')
          for span in year :
               Year Span.append(span.text)
          len(Year_Span)
Out[99]: 100
```

```
In [100]: Genre = []
          genre = driver.find_elements(By.XPATH , '//div[@class="lister-item-content"]/p/span[5]')
          for gen in genre :
              Genre.append(gen.text)
          len(Genre)
Out[100]: 100
In [101]: Rating = []
          ratings = driver.find_elements(By.XPATH , '//div[@class="ipl-rating-star small"]/span[2]')
          for rating in ratings :
              Rating.append(rating.text)
          len(Rating)
Out[101]: 100
In [102]: Run_Times = []
          run_time = driver.find_elements(By.XPATH , '//div[@class="lister-item-content"]/p/span[3]')
          for time in run_time :
              Run_Times.append(time.text)
          len(Run_Times)
Out[102]: 100
In [103]: Votes = []
          votes = driver.find_elements(By.XPATH , '//div[@class="lister-item-content"]/p[4]/span[2]')
          for vote in votes :
              Votes.append(vote.text)
          len(Votes)
Out[103]: 100
```

```
In [110]: df = pd.DataFrame({
                'NAME' : Name ,
               'YEAR SPAN' : Year_Span ,
               'GENRE' : Genre ,
               'RUN TIMES' : Run_Times ,
               'RATING' : Rating ,
               'VOTES' : Votes
           })
           # df['Serial_Number'] = range(1, len(df) + 1)
           # df.set index['Serial Number' , implace==True]
Out[110]:
                            NAME YEAR SPAN
                                                           GENRE RUNTIMES RATING
                                                                                       VOTES
            0
                    Game of Thrones (2011-2019) Action, Adventure, Drama
                                                                       55 min
                                                                                 9.2 2.262.543
            1
                     Stranger Things (2016–2025)
                                               Drama, Fantasy, Horror
                                                                       51 min
                                                                                 8.7 1,320,469
            2
                   The Walking Dead (2010-2022)
                                                Drama, Horror, Thriller
                                                                       44 min
                                                                                 8.1 1,072,255
            3
                    13 Reasons Why (2017-2020)
                                                                                 7.5 313,477
                                               Drama, Mystery, Thriller
                                                                       60 min
            4
                          The 100 (2014-2020)
                                                Drama, Mystery, Sci-Fi
                                                                       43 min
                                                                                 7.6
                                                                                      273,410
            95
                      True Detective
                                      (2014-)
                                                Crime, Drama, Mystery
                                                                       55 min
                                                                                 8.9
                                                                                       645,547
            96
                         Teen Wolf (2011-2017)
                                               Action, Drama, Fantasy
                                                                       41 min
                                                                                 7.7
                                                                                       162,062
            97
                           The OA (2016–2019)
                                             Drama, Fantasy, Mystery
                                                                       60 min
                                                                                 7.8
                                                                                       114,878
                      The Simpsons
                                      (1989-)
                                                  Animation, Comedy
                                                                       22 min
                                                                                 8.7
                                                                                       433,090
            99 Desperate Housewives (2004–2012) Comedy, Drama, Mystery
                                                                                       138.688
                                                                       45 min
                                                                                 7.6
           100 rows × 6 columns
In [111]: '''08) Details of Datasets from UCI machine learning repositories.
           Url = https://archive.ics.uci.edu/ You
           have to find the following details:
           A) Dataset name
           B) Data type
           C) Task
           D) Attribute type
           E) No of instances
           F) No of attribute G) Year
            Note: - from the home page you have to go to the Show All Dataset page through code.'''
Out[111]: 'Q8) Details of Datasets from UCI machine learning repositories.\nUrl = https://archive.ics.uci.edu/ (https://archive.ics.uci.edu/) You\nhave to find the following details:\n
           A) Dataset name\nB) Data type\nC) Task\nD) Attribute type\nE) No of instances\nF) No of attribute G) Year\n Note: - from the home page you have to go to the Show All Dataset
           page through code.'
In [113]: driver.get('https://archive.ics.uci.edu/')
In [119]: # data = driver.find elements(By.XPATH , '//div[@class="relative col-span-8 sm:col-span-7"]')
           # Len(data)
           data set url = []
           data = driver.find_element(By.XPATH , '/html/body/div[1]/div[1]/header/nav/ul/li[1]/a')
           data_set_url.append(data.get_attribute("href"))
           data set url
Out[119]: ['https://archive.ics.uci.edu/datasets']
```

all_datasets_link.click()

all_datasets_link = driver.find_element(By.LINK_TEXT, 'View ALL Data Sets')