# Q1: Write a python program to scrape data for "Data Analyst" Job position in "Bangalore" location. You have to scrape the job-title, job-location, company\_name, experience\_required. You have to scrape first 10 jobs data

```
In [1]: !pip install selenium
        Requirement already satisfied: selenium in c:\users\dell\anaconda3\lib\site-packages (4.15.2)
        Requirement already satisfied: certifi>=2021.10.8 in c:\users\dell\anaconda3\lib\site-packages (from seleniu
        m) (2022.12.7)
        Requirement already satisfied: urllib3[socks]<3,>=1.26 in c:\users\dell\anaconda3\lib\site-packages (from sel
        enium) (1.26.14)
        Requirement already satisfied: trio-websocket~=0.9 in c:\users\dell\anaconda3\lib\site-packages (from seleniu
        m) (0.11.1)
        Requirement already satisfied: trio~=0.17 in c:\users\dell\anaconda3\lib\site-packages (from selenium) (0.23.
        Requirement already satisfied: sortedcontainers in c:\users\dell\anaconda3\lib\site-packages (from trio~=0.17
        ->selenium) (2.4.0)
        Requirement already satisfied: exceptiongroup>=1.0.0rc9 in c:\users\dell\anaconda3\lib\site-packages (from tr
        io \sim = 0.17 - selenium) (1.1.3)
        Requirement already satisfied: attrs>=20.1.0 in c:\users\dell\anaconda3\lib\site-packages (from trio~=0.17->s
        elenium) (22.1.0)
        Requirement already satisfied: outcome in c:\users\dell\anaconda3\lib\site-packages (from trio~=0.17->seleniu
        m) (1.3.0.post0)
        Requirement already satisfied: cffi>=1.14 in c:\users\dell\anaconda3\lib\site-packages (from trio~=0.17->sele
        Requirement already satisfied: sniffio>=1.3.0 in c:\users\dell\anaconda3\lib\site-packages (from trio~=0.17->
        selenium) (1.3.0)
        Requirement already satisfied: idna in c:\users\dell\anaconda3\lib\site-packages (from trio~=0.17->selenium)
        (3.4)
        Requirement already satisfied: wsproto>=0.14 in c:\users\dell\anaconda3\lib\site-packages (from trio-websocke
        t\sim=0.9->selenium) (1.2.0)
        Requirement already satisfied: PySocks!=1.5.7,<2.0,>=1.5.6 in c:\users\dell\anaconda3\lib\site-packages (from
        urllib3[socks]<3,>=1.26->selenium) (1.7.1)
        Requirement already satisfied: pycparser in c:\users\dell\anaconda3\lib\site-packages (from cffi>=1.14->trio~
        =0.17->selenium) (2.21)
        Requirement already satisfied: h11<1,>=0.9.0 in c:\users\dell\anaconda3\lib\site-packages (from wsproto>=0.14
        ->trio-websocket~=0.9->selenium) (0.14.0)
In [2]: |import selenium
        from selenium import webdriver
        import pandas as pd
        from selenium.webdriver.common.by import By
        import warnings
        warnings.filterwarnings("ignore")
        import time
In [3]: driver = webdriver.Chrome()
In [4]: driver.get("https://www.shine.com/")
In [6]: time.sleep(10)
        allow_btn = driver.find_element(By.XPATH,"/html/body/div/div[2]/div/div/div/div/button")
        allow_btn.click()
In [8]: | click = driver.find element(By.CLASS NAME, 'searchBarInput')
        click.click()
In [9]: designation = driver.find_element(By.CLASS_NAME, "form-control")
        designation.send_keys("Data Analyst")
```

```
In [10]: location =driver.find element(By.XPATH,'/html/body/div/div/4]/div/div[2]/div/form/div/div[1]/ul/li[2]/d
         location.send_keys("Bangalore")
In [12]: | search = driver.find_element(By.CLASS_NAME, "searchForm_btnWrap_advance__VYBHN")
         search.click()
In [14]: time.sleep(10)
         allow_btn = driver.find_element(By.XPATH,"/html/body/div[1]/div[2]/div/div/div/div/button")
         allow_btn.click()
In [15]: close = driver.find_element(By.XPATH,"/html/body/div[1]/div[1]/div[1]/div/div/button")
         close.click()
In [16]: job_title = []
         title_tags =driver.find_elements(By.XPATH,'//h2[@itemprop="name"]//a')
         for i in title_tags:
             title = i.text
             job_title.append(title)
In [17]: print(len(job_title))
         20
In [18]: Loc = []
         loc_tags = driver.find_elements(By.XPATH,'//div[@class=" jobCard_jobCard_lists_item__YxRkV jobCard_locationIco
         for i in loc tags:
             location =i.text
             Loc.append(location)
In [19]: print(len(Loc))
         20
In [20]: company name = []
         com_tags = driver.find_elements(By.XPATH,'//div[@class="jobCard_jobCard_cName__mYnow"]//span')
         for i in com_tags:
             company_name.append(i.text)
In [21]: print(len(company_name))
         20
In [22]: exp_req =[]
         exp_tags = driver.find_elements(By.XPATH,'//div[@class=" jobCard_jobCard_lists_item__YxRkV jobCard_jobIcon__3F
         for i in exp tags:
             exp req.append(i.text)
In [23]: print(len(exp req))
         20
```

```
In [24]: df = pd.DataFrame({'Title':job title, 'Location':Loc, 'Company Name':company name, 'Experience':exp req})
            df.head(10)
Out[24]:
                                          Title
                                                      Location Company Name Experience
             0
                                                                                    0 to 4 Yrs
                          Data Analyst Vacancy
                                                Bangalore\n+14
                                                                 divya interprises
                          Data Analyst Vacancy Bangalore\n+14
                                                                                    0 to 4 Yrs
                                                                 divva interprises
                           Clinical Data Analyst
                                                                  quiscon biotech
                                                                                    0 to 2 Yrs
                                                 Bangalore\n+4
             3 Data Analyst Urgent Recruitment Bangalore\n+14
                                                                                    0 to 4 Yrs
                                                                 divya interprises
             4 Data Analyst Urgent Recruitment
                                                                                    0 to 4 Yrs
                                                Bangalore\n+14
                                                                 divva interprises
                Data Analyst Urgent Recruitment
                                                Bangalore\n+14
                                                                 divya interprises
                                                                                    0 to 4 Yrs
             6
                                                                                    1 to 3 Yrs
                                 Data Analyst 1
                                                     Bangalore
                                                                        merck Itd
             7
                           Clinical Data Analyst
                                                 Bangalore\n+6
                                                                   techno endura
                                                                                     0 to 1 Yr
             8
                         Data Analytics - Analyst
                                                     Bangalore
                                                                       jpmorgan
                                                                                    0 to 4 Yrs
                         Hiring For Data Analyst Bangalore\n+14
                                                                                    0 to 4 Yrs
                                                                 divya interprises
```

# Q2:Write a python program to scrape data for "Data Scientist" Job position in "Bangalore" location. Youhave to scrape the job-title, job-location, company\_name. You have to scrape first 10 jobs data. This task will be done in following steps:

```
In [25]: driver = webdriver.Chrome()
In [26]: driver.get("https://www.shine.com/")
In [28]: time.sleep(15)
         allow_btn = driver.find_element(By.XPATH,"/html/body/div/div[2]/div/div/div/div/button")
         allow btn.click()
In [30]: click = driver.find element(By.CLASS NAME, 'searchBarInput')
         click.click()
In [31]: designation = driver.find_element(By.CLASS_NAME, "form-control")
         designation.send_keys("Data Scientist")
In [32]: location =driver.find_element(By.XPATH,'/html/body/div/div[4]/div/div[2]/div/form/div/div[1]/ul/li[2]/d
         location.send_keys("Bangalore")
In [34]: | search = driver.find_element(By.CLASS_NAME, "searchForm_btnWrap_advance__VYBHN")
         search.click()
In [35]: time.sleep(15)
         allow_btn = driver.find_element(By.XPATH,"/html/body/div[1]/div[2]/div/div/div/div/button")
         allow_btn.click()
In [36]: close = driver.find_element(By.XPATH,"/html/body/div[1]/div[1]/div[1]/div/div/button")
         close.click()
```

```
In [37]: job title = []
          title_tags =driver.find_elements(By.XPATH,'//h2[@itemprop="name"]//a')
          for i in title_tags:
               title = i.text
               job title.append(title)
In [38]: Loc = []
          loc_tags = driver.find_elements(By.XPATH,'//div[@class=" jobCard_jobCard_lists_item__YxRkV jobCard_locationIco
          for i in loc_tags:
               location =i.text
               Loc.append(location)
In [39]: company name = []
           com_tags = driver.find_elements(By.XPATH,'//div[@class="jobCard_jobCard_cName__mYnow"]//span')
          for i in com_tags:
               company_name.append(i.text)
In [40]: |exp_req =[]
          exp tags = driver.find elements(By.XPATH,'//div[@class=" jobCard jobCard lists item YxRkV jobCard jobIcon 3F(
          for i in exp tags:
               exp_req.append(i.text)
In [41]: | df = pd.DataFrame({'Title':job_title,'Location':Loc,'Company Name':company_name,'Experience':exp_req})
          df.head(10)
Out[41]:
                                      Title
                                                Location
                                                                         Company Name Experience
                                                                                          0 to 4 Yrs
                       Data Scientist Vacancy
                                           Bangalore\n+14
                                                                          divya interprises
           1
              Data Scientist Urgent Recruitment
                                           Bangalore\n+14
                                                                          divva interprises
                                                                                          0 to 4 Yrs
                     Data Scientist-Bangalore
                                                                        the fashion cosmo
                                                                                          0 to 3 Yrs
                                               Bangalore
           3
                      Data Scientist AI ML CV
                                                Bangalore
                                                                             bosch group
                                                                                          3 to 5 Yrs
                     Data Scientist-Bangalore
                                                Bangalore
                                                                         shiva hr services
                                                                                          0 to 3 Yrs
                     Data Scientist AI ML NLP
                                                Bangalore
                                                                                          3 to 5 Yrs
                                                                             bosch group
                           Phd Data Scientist
                                                Bangalore
                                                                             bosch group
                                                                                          2 to 5 Yrs
                      Hiring For Data Scientist Bangalore\n+14
                                                                                          0 to 4 Yrs
                                                                          divva interprises
```

Q3: In this question you have to scrape data using the filters available on the webpage You have to use the location and salary filter. You have to scrape data for "Data Scientist" designation for first 10 job results. You have to scrape the job-title, job-location, company name, experience required. The location filter to be used is "Delhi/NCR". The salary filter to be used is "3-6" lakhs

Bangalore racanaa energy solution private lim...

Bangalore

3 to 6 Yrs

8 to 12 Yrs

true caller

```
In [42]: driver = webdriver.Chrome()

In [43]: driver.get("https://www.shine.com/")

In [44]: time.sleep(15)
    allow_btn = driver.find_element(By.XPATH,"/html/body/div/div/div/div/div/div/button")
    allow_btn.click()
```

Data Scientist

Staff Data Scientist & Team Lead

```
In [45]: | click = driver.find element(By.CLASS NAME, 'searchBarInput')
         click.click()
In [46]: designation = driver.find_element(By.CLASS_NAME, "form-control")
         designation.send_keys("Data Scientist")
         time.sleep(3)
         designation.click()
In [48]:
         search = driver.find_element(By.CLASS_NAME, "searchForm_btnWrap_advance__VYBHN")
         search.click()
In [50]: time.sleep(10)
         allow_btn = driver.find_element(By.XPATH,"/html/body/div[1]/div[2]/div/div/div/div/button")
         allow_btn.click()
In [51]: close = driver.find_element(By.XPATH,"/html/body/div[1]/div[1]/div[1]/div/div/button")
         close.click()
         Loc_fil = driver.find_element(By.CLASS_NAME, 'filter_filter_lists_items__wlFfo')
In [52]:
         Loc fil.click()
In [53]: location_name = driver.find_element(By.XPATH,'/html/body/div[1]/div[1]/div[3]/div/div[1]/div/div[2]/div[2]/div
         location_name.click()
In [54]: | show_result = driver.find_element(By.XPATH,'//div[@class="filter_btnWrap__5ToWy"]//button[2]')
In [55]: | sal_fil = driver.find_element(By.XPATH,'/html/body/div[1]/div[1]/div[3]/div/div[1]/div/div[2]/div/div[3]/but
         sal_fil.click()
In [56]: | salary = driver.find_element(By.XPATH,'/html/body/div[1]/div[1]/div[3]/div/div[1]/div/div[2]/div/div/div/div
         salary.click()
In [57]:
         show result = driver.find element(By.XPATH,'/html/body/div[1]/div[1]/div[3]/div/div[1]/div/div[2]/div[2]/div/div[1]
         show_result.click()
In [58]:
         job_title = []
         title tags =driver.find elements(By.XPATH,'//h2[@itemprop="name"]//a')
         for i in title tags:
             title = i.text
             job_title.append(title)
In [59]: Loc = []
         loc_tags = driver.find_elements(By.XPATH,'//div[@class=" jobCard_jobCard_lists_item__YxRkV jobCard_locationIco
         for i in loc_tags:
             location =i.text
             Loc.append(location)
In [60]: company_name = []
         com_tags = driver.find_elements(By.XPATH,'//div[@class="jobCard_jobCard_cName__mYnow"]//span')
         for i in com tags:
             company_name.append(i.text)
```

```
In [61]: exp req =[]
           exp_tags = driver.find_elements(By.XPATH,'//div[@class=" jobCard_jobCard_lists_item__YxRkV jobCard_jobIcon__3Fl
           for i in exp_tags:
                exp_req.append(i.text)
In [62]: df = pd.DataFrame({'Title':job_title,'Location':Loc,'Company Name':company_name,'Experience':exp_req})
           df.head(10)
Out[62]:
                             Title
                                    Location
                                                            Company Name Experience
            0 Data Scientist- Delhi
                                       Delhi
                                                           the fashion cosmo
                                                                               0 to 3 Yrs
               Data Scientist-Delhi
                                       Delhi
                                                            shiva hr services
                                                                               0 to 3 Yrs
               Data Scientist- Delhi
                                       Delhi
                                                           the fashion cosmo
                                                                               0 to 3 Yrs
              Data Scientist- Delhi
                                       Delhi
                                                           the fashion cosmo
                                                                              0 to 3 Yrs
                     Data Scientist
                                    Delhi\n+4
                                                  acme services private limited
                                                                              3 to 5 Yrs
                     Data Scientist
                                    Delhi\n+6
                                                             quiscon biotech
                                                                               0 to 1 Yr
                     Data Scientist
                                                                              3 to 5 Yrs
                                    Delhi\n+4
                                                  acme services private limited
               Clinical Data Analyst
                                    Delhi\n+6
                                                              techno endura
                                                                               0 to 1 Yr
```

v-tech data outsourcing

### Q4: Scrape data of first 100 sunglasses listings on flipkart.com. You have to scrape four attributes:

0 to 2 Yrs

1 to 6 Yrs

```
In [63]: driver = webdriver.Chrome()
In [64]: driver.get("http://www.flipkart.com/")
In [65]: | close_btn = driver.find_element(By.XPATH,'/html/body/div[3]/div/span')
         close_btn.click()
In [66]: search_field= driver.find_element(By.CLASS_NAME, "Pke_EE")
         search_field.send_keys("sunglasses")
In [67]: search btn = driver.find element(By.XPATH,'/html/body/div[1]/div/div[1]/div/div/div/div/div/div/div[1]/div/div/div
         search_btn.click()
In [69]: brand = []
         discription = []
         MRP = []
         start=0
         end =3
         for page in range(start,end):
             brand_name = driver.find_elements(By.XPATH, '//div[@class="_2WkVRV"]')
             for i in brand name:
                 brand.append(i.text)
             prod_dis = driver.find_elements(By.XPATH,'//a[@class="IRpwTa"]')
             for i in prod dis:
                 discription.append(i.text)
             price = driver.find_elements(By.XPATH,'//div[@class="_30jeq3"]')
             for i in price:
                 MRP.append(i.text)
             next_btn = driver.find_element(By.XPATH,'//a[@class="_1LKT03"]//span')
             next btn.click()
             time.sleep(4)
```

Data Modeler

Delhi\n+9

Biostatistician Delhi\n+17 national seeds corporation limited

```
In [71]: print(len(discription),len(brand),len(MRP))
           118 120 120
In [73]: | df = pd.DataFrame({'Brand':brand,'Price':MRP})
In [75]: df1 = pd.DataFrame({"Product Discription":discription})
In [76]: | df2 = pd.concat([df,df1],axis = 1)
           df2.head(100)
Out[76]:
                          Brand Price
                                                                  Product Discription
                    ROYAL SON
                                 ₹339
                                                        Mirrored Aviator Sunglasses (58)
             1 VINCENT CHASE ₹703
                                         Polarized, UV Protection Retro Square Sunglass...
                          SRPM ₹149
                                                 UV Protection Wayfarer Sunglasses (50)
             3
                        Fastrack ₹549
                                                 UV Protection Wayfarer Sunglasses (58)
                       GANSTA
                                          Night Vision, Riding Glasses Rectangular Sungl...
                                  ₹79
            95
                       Roadster
                                ₹199
                                        UV Protection, Riding Glasses Rectangular Sung...
                    ROYAL SON
            96
                                ₹424
                                        Gradient, UV Protection Rectangular Sunglasses...
                                               UV Protection Rectangular Sunglasses (59)
            97
                     Singco India
                                 ₹396
```

₹79 UV Protection Sports, Wrap-around Sunglasses (70)

Polarized, UV Protection Wayfarer, Retro Squar...

100 rows × 3 columns

**GANSTA** 

Roadster ₹249

98

99

## Q5: Scrape 100 reviews data from flipkart.com for iphone11 phone. You have to go the link:

```
In [77]: driver = webdriver.Chrome()
In [78]: driver.get("https://www.flipkart.com/apple-iphone-11-black-64-gb/p/itm4e5041ba101fd?pid=MOBFWQ6BXGJCEYNY&lid=Li
In [79]: | all_reviews = driver.find_element(By.XPATH,'//div[@class="_3UAT2v _16PBlm"]//span')
         all reviews.click()
In [80]: review = []
         summery = []
         start = 0
         end = 11
         for page in range(start,end):
             rating_name = driver.find_elements(By.XPATH,'//p[@class="_2-N8zT"]')
             for i in rating name:
                 review.append(i.text)
             summery_name = driver.find_elements(By.XPATH,'//div[@class="t-ZTKy"]//div//div')
             for i in summery name:
                 summery.append(i.text)
             next_btn = driver.find_element(By.XPATH,'/html/body/div[1]/div/div[3]/div/div[2]/div[13]/div/div/nav/a
             next btn.click()
             time.sleep(3)
```

```
In [81]: print(len(review),len(summery))
           110 110
In [82]: df = pd.DataFrame({'Reviews':review,"Review Summeries":summery})
           df.head(100)
Out[82]:
                          Reviews
                                                              Review Summeries
             0 Highly recommended
                                       Awesome Battery Life...Camera clarity is too g...
                     Perfect product!
                                                                     Photos super
                  Best in the market!
                                                                    Good Camera
                                    Camera is awesome\nBest battery backup\nA perf...
                     Classy product
             4
                  Worth every penny
                                        Feeling awesome after getting the delivery of ...
            95
                    Simply awesome
                                      Best phone ur money can get specially if u wan...
            96
                            Terrific
                                         Very very good excellent thank you for Flipkart
            97
                            Terrific
                                     98
                            Brilliant
                                                                   iPhone camera
                         Wonderful
                                        Why is Apple not giving a charger with any of ...
```

#### 100 rows × 2 columns

## Q6: Scrape data forfirst 100 sneakers you find whenyou visit flipkart.com and search for "sneakers" in the search field.

```
In [88]: brand = []
         discription = []
         MRP =[]
         start=0
         end = 3
         for page in range(start,end):
             #for Brand Name
             brand_name = driver.find_elements(By.XPATH, '//div[@class="_2WkVRV"]')
             for i in brand_name:
                 brand.append(i.text)
             # for Product Discription
             prod_dis = driver.find_elements(By.XPATH,'//a[@class="IRpwTa"]')
             for i in prod_dis:
                 discription.append(i.text)
             # for price show
             price = driver.find_elements(By.XPATH,'//div[@class="_30jeq3"]')
             for i in price:
                 MRP.append(i.text)
             next_btn = driver.find_element(By.XPATH,'/html/body/div/div/div[3]/div[1]/div[2]/div[12]/div/nav/a[11]
             next btn.click()
             time.sleep(4)
In [89]: print(len(brand),len(discription),len(MRP))
         120 117 120
In [90]: df = pd.DataFrame({'Brand':brand,'Price':MRP})
In [91]: df1 = pd.DataFrame({'Product Discription':discription})
In [92]: df2 = pd.concat([df,df1],axis=1)
         df2.head(100)
Out[92]:
```

	Brand	Price	Product Discription
0	BRUTON	₹497	Combo Pack Of 2 Men's Casual Shoes Sneakers Fo
1	BRUTON	₹497	!Combo Pack Of 2 Casual Shoes! Sneakers For Men
2	aadi	₹289	Synthetic Leather  Lightweight Comfort Summer
3	URBANBOX	₹299	Trending Stylish Casual Outdoor Sneakers Shoes
4	Layasa	₹299	Sneakers For Men
95	HRX by Hrithik Roshan	₹924	Rerooted Classics Sneakers For Men
96	RapidBox	₹595	Sneakers For Men
97	Peelu	₹647	Synthetic Leather  Lightweight Comfort Summer
98	PUMA	₹2,249	Smash V2 Buck Sneakers For Men
99	MEGPAR	₹419	Megpar White New Stylish Look Comfortable Casu

100 rows × 3 columns

Q7: Go to webpage <a href="https://www.amazon.in/">https://www.amazon.in/</a> Enter "Laptop" in the search field and then click the search icon. Then set CPU Type filter to "Intel Core i7" as shown in the below image:

```
In [93]: driver = webdriver.Chrome()
```

```
In [94]: driver.get("https://www.amazon.in/")
 In [97]: | search_field= driver.find_element(By.ID, 'nav-bb-search')
           search_field.send_keys("Laptop")
 In [99]: search_btn = driver.find_element(By.XPATH,'//input[@class="nav-bb-button"]')
           search_btn.click()
In [100]: cpu = driver.find_element(By.XPATH,'/html/body/div[1]/div[1]/div[2]/div/div[3]/span/div[1]/div/div/div[6]
           cpu.click()
In [101]: title = []
           rating = []
           MRP = []
                 #for Brand Name
           title_name = driver.find_elements(By.XPATH,'//div[@class="a-section a-spacing-none puis-padding-right-small s-
           for i in title_name:
               title.append(i.text)
                # for Product Discription
           rating_num = driver.find_elements(By.XPATH,'//span[@class="a-size-base s-underline-text"]')
           for i in rating num:
                rating.append(i.text)
                 # for price show
           price = driver.find_elements(By.XPATH,'//span[@class="a-price-whole"]')
           for i in price:
                MRP.append(i.text)
In [102]: print(len(title),len(rating),len(MRP))
           24 21 23
In [103]: | df = pd.DataFrame({'Title':title})
In [104]: | df1 = pd.DataFrame({'Price':MRP})
In [105]: | df2 = pd.DataFrame({'rating':rating})
In [107]: | df3 = pd.concat([df,df1,df2],axis=1)
           df3.head(10)
Out[107]:
                                                            Price rating
                  MSI Modern 14, Intel 12th Gen. i7-1255U, 36CM ...
            1 ASUS TUF Gaming F15, 15.6"(39.62 cms) FHD 144H...
                                                           68.990
                                                                     52
            2
                   Lenovo IdeaPad Slim 3 Intel Core i7 11th Gen 1... 52,990
                                                                     59
            3
                  MSI GF63 Thin, Intel Core i7-11800H, 40CM FHD ... 57,990
                                                                    150
                  ASUS Vivobook 15, Intel Core i7-12650H 12th Ge... 60,990
                                                                    330
            5
                   HP Laptop 15s, 12th Gen Intel Core i7-1255U, 1... 63,990
                                                                     20
            6
                 MSI GF63 Thin, Intel Core i7-11800H, 40CM FHD ... 64,990
                                                                     96
            7
                     Dell Inspiron 5430 Laptop, Intel Core i7-1360P... 84,990
                                                                     46
            8
                   Acer Aspire Lite Premium Metal Laptop 11th Gen... 47,990
                                                                    173
                 Samsung Galaxy Book3 Core i7 13th Gen 1355U - ... 84,390
                                                                     28
```

### Q8: Write a python program to scrape data for Top 1000 Quotes of All Time.

```
In [108]: driver = webdriver.Chrome()
In [109]: driver.get("https://www.azquotes.com/")
In [110]: top_quotes =driver.find_element(By.XPATH,'/html/body/div[1]/div[1]/div[1]/div[3]/ul/li[5]/a')
            top_quotes.click()
In [111]: quotes = []
            author = []
            type_of_quotes =[]
            start = 0
            end = 9
            for pages in range(start,end):
                 quotes_name = driver.find_elements(By.XPATH,'//a[@class="title"]')
                 for i in quotes_name:
                     quotes.append(i.text)
                 author_name = driver.find_elements(By.XPATH,'//div[@class="author"]//a')
                 for i in author_name:
                     author.append(i.text)
                 types = driver.find elements(By.XPATH,'//div[@class="tags"]')
                 for i in types:
                     type_of_quotes.append(i.text)
                 next_btn = driver.find_element(By.XPATH,'//li[@class="next"]//a')
                 next btn.click()
                 time.sleep(2)
In [112]: print(len(quotes),len(author),len(type_of_quotes))
            900 900 900
            df = pd.DataFrame({'Quotes':quotes,'Author Name':author,'Type of Quotes':type_of_quotes})
Out[113]:
                                                                   Author Name
                                                     Quotes
                                                                                                       Type of Quotes
                   The essence of strategy is choosing what not t...
                                                                  Michael Porter Essence, Deep Thought, Transcendentalism
                   One cannot and must not try to erase the past ...
                                                                     Golda Meir
                                                                                                 Inspiration, Past, Trying
               2
                    Patriotism means to stand by the country. It d... Theodore Roosevelt
                                                                                                   Country, Peace, War
                 Death is something inevitable. When a man has ...
                                                                 Nelson Mandela
                                                                                          Inspirational, Motivational, Death
                     You have to love a nation that celebrates its ...
                                                                 Erma Bombeck
                                                                                               4th Of July, Food, Patriotic
             895
                    To love means loving the unlovable. To forgive... Gilbert K. Chesterton
                                                                                             Love, Inspirational, Success
             896
                    Be brave. Take risks. Nothing can substitute e...
                                                                   Paulo Coelho
                                                                                        Encouraging, Courage, Inspiration
             897
                      If you really want to do something, you'll fin...
                                                                      Jim Rohn
                                                                                        Inspirational, Motivational, Success
             898
                      It is neither wealth nor splendor; but tranqui...
                                                               Thomas Jefferson
                                                                                                  Life, Happiness, Work
```

Q9: Write a python program to display list of respected former Prime Ministers of India(i.e. Name, Born-Dead, Term of office, Remarks) from <a href="https://www.jagranjosh.com/">https://www.jagranjosh.com/</a>).

Henrik Ibsen

Inspirational, Inspiring, Positivity

```
In [114]: driver = webdriver.Chrome()
```

899

900 rows × 3 columns

A thousand words will not leave so deep an imp...

```
In [115]: driver.get("https://www.jagranjosh.com/")
In [116]: GK =driver.find_element(By.XPATH,'/html/body/div[1]/header/nav/div/div[3]/ul/li[6]/a')
In [118]: | prime_ministers = driver.find_element(By.XPATH,'/html/body/div[2]/div/div/div[2]/div/div[10]/div/div/ul/li[2]/div/div
           prime_ministers.click()
In [120]: data = []
           table = driver.find_elements(By.XPATH,'//div[@class="table-box"]//table//tbody//tr[2]')
           #rows = table.find_element(By.TAG_NAME,'tr')
          for row in table:
               cols = row.find elements(By.TAG NAME, 'td')
               if len(cols) == 5:
                   name = cols[0].text
                   born_dead = cols[1].text
                   term_of_office = cols[2].text
                   remarks = cols[3].text
               data.append([name, born dead, term of office, remarks])
In [121]: | df = pd.DataFrame(data, columns=['Name', 'Born-Dead', 'Term of Office', 'Remarks'])
Out[121]:
              Name
                         Born-Dead Term of Office
                                                                               Remarks
                 1. Jawahar Lal Nehru
                                     (1889–1964) 15 August 1947 to 27 May 1964\n16 years, 286 days
```

## Q10: Write a python program to display list of 50 Most expensive cars in the world (i.e. Car name and Price) from

https://www.motor1.com/ (https://www.motor1.com/)

```
In [122]: driver = webdriver.Chrome()
In [123]: driver.get("https://www.motor1.com/")
In [124]: search bar = driver.find element(By.XPATH,'//input[@class="m1-search-panel-input m1-search-form-text"]')
          search_bar.send_keys('50 most expensive cars')
In [125]: search btn = driver.find element(By.XPATH,'//button[@class="m1-search-panel-button m1-search-form-button-anima
          search_btn.click()
In [126]: | world = driver.find element(By.XPATH, '/html/body/div[10]/div[9]/div/div[1]/div/div[2]/div/div[1]/h3/a')
          world.click()
In [127]: | car_name = []
          price = []
          title_name = driver.find_elements(By.XPATH,'//h3[@class="subheader"]')
          for i in title_name:
              car_name.append(i.text)
          mrp= driver.find_elements(By.TAG_NAME, 'strong')
          for i in mrp:
              price.append(i.text)
```

```
In [128]: print(len(car_name),len(price))
51 50

In [129]: df = pd.DataFrame({'Car Name':car_name})

In [130]: df1 = pd.DataFrame({'Price':price})

In [131]: df2 = pd.concat([df,df1],axis=1)
```

In [132]: df2.head(50)

#### Out[132]:

	Car Name	Price
0	Aston Martin Valour	Price: \$1.5 Million
1	McLaren Elva	Price: \$1.7 Million
2	Czinger 21C	Price: \$1.7 Million
3	Ferrari Monza	Price: \$1.7 Million
4	Gordon Murray T.33	Price: \$1.7 Million
5	Koenigsegg Gemera	Price: \$1.7 Million
6	Zenvo TSR-S	Price: \$1.7 Million
7	Hennessey Venom F5	Price: \$1.8 Million
8	Bentley Bacalar	Price: \$1.9 Million
9	Hispano Suiza Carmen Boulogne	Price: \$1.9 Million
10	Bentley Mulliner Batur	Price: \$2.0 Million
11	Deus Vayanne	Price: \$2.0 Million
12	SSC Tuatara	Price: \$2.0 Million
13	Lotus Evija	Price: \$2.1 Million
14	Aston Martin Vulcan	Price: \$2.3 Million
15	Delage D12	Price: \$2.3 Million
16	Ferrari Daytona SP3	Price: \$2.3 Million
17	McLaren Speedtail	Price: \$2.3 Million
18	Rimac Nevera	Price: \$2.4 Million
19	Pagani Utopia	Price: \$2.5 Million
20	Pininfarina Battista	Price: \$2.5 Million
21	Gordon Murray T.50	Price: \$2.6 Million
22	Lamborghini Countach	Price: \$2.6 Million
23	Mercedes-AMG Project One	Price: \$2.7 Million
24	Zenvo Aurora	Price: \$2.8 Million
25	Aston Martin Victor	Price: \$3.0 Million
26	Hennessey Venom F5 Roadster	\$3.0 Million
27	Koenigsegg Jesko	Price: \$3.0 Million
28	Aston Martin Valkyrie	Price: \$3.2 Million
29	W Motors Lykan Hypersport	Price: \$3.4 Million
30	McLaren Solus	\$3.5 Million
31	Lamborghini Sian	Price: \$3.6 million
32	Koenigsegg CC850	Price: \$3.7 Million
33	Bugatti Chiron Super Sport 300+	Price: \$3.9 Million
34	Lamborghini Veneno	Price: \$4.5 Million
35	Bugatti Bolide	Price: \$4.7 Million
36	Pininfarina B95 Speedster	Price: \$4.8 Million
37	Bugatti Mistral	Price: \$5.0 Million
38	Pagani Huayra Imola	Price: \$5.4 Million
39	Bugatti Divo	Price: \$5.8 Million
40	SP Automotive Chaos	Price: \$6.4 Million
41	Pagani Codalunga	Price: \$7.4 Million
42	777 Hypercar	Price: \$7.5 Million
43	Mercedes-Maybach Exelero	Price: \$8.0 Million
44	Bugatti Chiran Profilée	Price: \$9.0 Million
45	Bugatti Chiron Profilée	Price: \$10.8 Million
46	Rolls-Royce Sweptail	Price: \$12.8 Million

47	Bugatti La Voiture Noire	Price: \$13.4 Million
48	Rolls-Royce Boat Tail*	Price: \$28.0 Million (est.)
49	Rolls-Royce La Rose Noire Droptail	Price: \$30 Million (est.)
	48	<b>S</b>

Price

Car Name