```
In [494... 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 [85]: driver=webdriver.Chrome()
```

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 [ ]: #Q1(1). First get the webpage https://www.shine.com/
          driver.get('https://www.shine.com/')
 In [ ]: #Q1(2) Enter "Data Analyst" in "Job title, Skills" field and enter "Bangalore" in "ent
          job title=driver.find element(By.CLASS NAME, 'form-control')
          job title.send keys('Data Analyst')
          location= driver.find_element(By.XPATH, '/html/body/div[1]/div[4]/div/div[2]/div[2]/di
          location.send keys('Bangalore')
         #Q1(3). Then click the search button
 In [ ]:
          search=driver.find_element(By.CLASS_NAME,'searchForm_btnWrap_advance__VYBHN')
          search.click()
          #Q1(4) Then scrape the data for the first 10 jobs results you get.
In [266...
          company location=[]
          location=driver.find_elements(By.XPATH,'//div[@class=" jobCard_jobCard_lists_item__YxF
          for x in location:
              company_location.append(x.text)
          company name=[]
          company=driver.find elements(By.CLASS NAME,'jobCard jobCard cName mYnow')[0:10]
          for x in company:
              company_name.append(x.text)
          experience required = []
          experience elements = driver.find elements(By.XPATH, '//div[contains(@class, "jobCard
```

```
for x in experience_elements:
    experience_required.append(x.text)

#Q1(5) Finally create a dataframe of the scraped data.
import pandas as pd
```

df=pd.DataFrame({'company_name':company_name,'company_location':company_location,'expense

Out[298]:

In [298...

	company_name	company_location	experience_required
0	quiscon biotech	Bangalore\n+17	0 to 4 Yrs
1	nina s hr consultancy	Bangalore	5 to 10 Yrs
2	nina s hr consultancy	Bangalore\n+14	0 to 4 Yrs
3	skyleaf consultants	Bangalore	4 to 6 Yrs
4	quiscon biotech	Bangalore\n+8	4 to 6 Yrs
5	acme services private limited	Bangalore	6 to 9 Yrs
6	seven consultancy	Bangalore	3 to 6 Yrs
7	alpine manpower services	Bangalore\n+15	0 to 4 Yrs
8	alpine manpower services	Bangalore\n+8	4 to 6 Yrs
9	nina s hr consultancy	Bangalore\n+6	0 to 3 Yrs

Q2:Write a python program to scrape data for "Data Scientist" Job position in "Bangalore" location. You have 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:

```
#Q2(3). Then click the search button
In [227...
           submit=driver.find element(By.XPATH,'/html/body/div[1]/div[4]/div/div[2]/div[2]/div/fd
           submit.click()
In [261...
          #Q2(4) Then scrape the data for the first 10 jobs results you get.
           job location=[]
           location=driver.find elements(By.XPATH,'//div[@class=" jobCard jobCard lists item YxF
           for x in location:
               job location.append(x.text)
           company name=[]
           company=driver.find_elements(By.XPATH,'//div[@class="jobCard_jobCard_cName__mYnow"]')[
           for x in company:
               company name.append(x.text)
          #Q2(5) Finally create a dataframe of the scraped data.
In [297...
           df=pd.DataFrame({'company_name':company_name,'job_location':job_location})
           df
Out[297]:
```

	company_name	job_location
0	quiscon biotech	Delhi\n+6
1	nina s hr consultancy	Delhi
2	nina s hr consultancy	Delhi
3	skyleaf consultants	Delhi
4	quiscon biotech	Delhi\n+6
5	acme services private limited	Delhi\n+4
6	seven consultancy	Delhi
7	alpine manpower services	Delhi
8	alpine manpower services	Delhi
9	nina s hr consultancy	Delhi

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

```
driver=webdriver.Chrome()
In [267...
          #1. first get the web page https://www.shine.com/
In [268...
          driver.get('https://www.shine.com/')
          #2. Enter "Data Scientist" in "Skill, Designations, and Companies" field.
In [269...
          job title=driver.find element(By.XPATH,'/html/body/div[1]/div[4]/div/div[2]/div[2]/div
          job title.send keys('Data Scientist')
          #3. Then click the search button
In [271...
           submit=driver.find element(By.XPATH,'/html/body/div[1]/div[4]/div/div[2]/div[2]/div/fd
           submit.click()
          #4. Then apply the location filter by checking the respective boxes
In [272...
          location=driver.find element(By.XPATH, '/html/body/div[1]/div[1]/div[4]/div/div[1]/div
          location.click()
          location_select=driver.find_element(By.XPATH,'/html/body/div[1]/div[1]/div[4]/div/div[
          location select.click()
          #4. Then apply the salary filter by checking the respective boxes
In [277...
           salary=driver.find_element(By.XPATH,'/html/body/div[1]/div[1]/div[4]/div/div[1]/div/di
           salary.click()
           select salary=driver.find element(By.XPATH,'/html/body/div[1]/div[1]/div[4]/div[4]/div[1]
           select salary.click()
          # click on show result
           show result=driver.find element(By.XPATH,'/html/body/div[1]/div[1]/div[4]/div/div[1]/d
           show result.click()
          #5. Then scrape the data for the first 10 jobs results you get.(job-location, company
In [293...
          company name=[]
           company=driver.find elements(By.XPATH,'//div[@class="jobCard jobCard cName mYnow"]')[
           for x in company:
              company_name.append(x.text)
           job location=[]
           location=driver.find_elements(By.XPATH,'//div[@class=" jobCard_jobCard_lists_item__YxF
           for x in location:
               job_location.append(x.text)
           experience req=[]
           experience=driver.find_elements(By.XPATH,'//div[@class=" jobCard_jobCard_lists_item__\
           for x in experience:
               experience req.append(x.text)
```

```
In [ ]: #6. Finally create a dataframe of the scraped data
    df=pd.DataFrame({'company_name':company_name,'job_location':job_location,'experience_undf
```

Q4: Scrape data of first 100 sunglasses listings on flipkart.com. You have to scrape four attributes: 1. Brand 2. Product Description 3. Price

```
driver=webdriver.Chrome()
In [300...
          #1. Go to Flipkart webpage by url :https://www.flipkart.com/
In [301...
          driver.get('http://www.flipkart.com/')
          #2. Enter "sunglasses" in the search fieldwhere "search for products, brands and more'
In [305...
           search=driver.find_element(By.XPATH,'/html/body/div[1]/div/div[1]/div[1]/div[2]/div[2]
           search.send_keys('Sunglasses')
           submit search=driver.find element(By.XPATH,'/html/body/div[1]/div/div[1]/div[1]/div[2]
           submit search.click()
          #3. Now Scraping data of first 100 sunglasses listings on flipkart.com including data
In [347...
          brand name=[]
           item price=[]
           start=0
           end=3
          for page in range (start,end):
              brand=driver.find_elements(By.XPATH,'//div[@class="_2WkVRV"]')
              for x in brand:
                   brand_name.append(x.text)
              price=driver.find elements(By.XPATH,'//div[@class=" 30jeq3"]')
              for x in price:
                   item_price.append(x.text)
              next page=driver.find element(By.XPATH,'/html/body/div/div/div[3]/div[1]/div[2]/di
              next_page.click()
              time.sleep(3)
          #4. Finally create a dataframe of the scraped data
In [349...
           df=pd.DataFrame({'brand_name':brand_name,'item_price':item_price})
           df[0:100]
```

Out[349]:		brand_name	item_price
	0	OAKLEY	₹7,352
	1	OAKLEY	₹7,752
	2	SRPM	₹204
	3	PIRASO	₹239
	4	Elligator	₹179
	•••		
	95	ROYAL SON	₹664
	96	ROYAL SON	₹854
	97	GANSTA	₹228
	98	ROYAL SON	₹899
	99	Ray-Ban	₹10,616

100 rows × 2 columns

Q5: Scrape 100 reviews data from flipkart.com for iphone11 phone.

```
In [350...
          driver=webdriver.Chrome()
In [353...
          #1. Go to Flipkart webpage
          driver.get('https://www.flipkart.com/apple-iphone-11-black-64-gb/p/itm4e5041ba101fd?pi
In [387...
          #2. As shown in the page you have to scrape the tick marked attributes. These are: 1.
          product rating=[]
           review_summary=[]
           Full_review=[]
          start=0
           end=3
          for page in range (start,end):
               rating=driver.find_elements(By.XPATH,'//div[@class="_3LWZIK _1BLPMq"]')
               for x in rating:
                   product_rating.append(x.text)
               Reviews=driver.find_elements(By.XPATH,'//p[@class="_2-N8zT"]')
               for x in Reviews:
                   review_summary.append(x.text)
               Fullreview=driver.find_elements(By.XPATH, '//div[@class="t-ZTKy"]')
               for x in Fullreview:
```

```
Full_review.append(x.text)

next_button=driver.find_element(By.XPATH,'/html/body/div[1]/div/div[3]/div/div/div
next_button.click()
time.sleep(3)
```

In [388...

#4. Finally create a dataframe of the scraped data
df=pd.DataFrame({'product_rating':product_rating,'review_summary':review_summary,'Full
df

Out[388]: product_rating review_summary Full_review 0 5 Classy product Photos super 1 5 Terrific Very very good 2 5 Terrific purchase Value for money 🔮 3 5 Classy product Camera is awesome\nBest battery backup\nA perf... 4 5 Wonderful This is amazing at all 5 Perfect Product!! Just wow! 6 Worth every penny Feeling awesome after getting the delivery of ... 7 Perfect product! V Good all 8 Best in the market! Good Camera 5 9 5 Fabulous! Super on and good performance of \infty 10 5 Must buy! It's really awesome 11 Great product Purple is best Camera is just wow 88 12 Worth the money 13 5 Must buy! Go for iPhone 11, if confused between iPhone ... 14 5 **Brilliant** Excellent Phone. Terrific purchase 5 Value for money 🖤 🖤 15 16 5 **Brilliant** very good camera quality 17 5 Fabulous! It's very good battery life and display and vi... 18 5 NYC Excellent 19 Best in the market! Damn this phone is a blast . Upgraded from and... 20 Best in the market! Such an awesome experience with iPhone 11 awes... 5 5 21 Awesome Phone. Battery backup top-notch... Awesome 22 It is better to buy iPhone 11 over iPhone 12 i... 5 Worth every penny 23 5 Wonderful Excellent Fabulous Adorable Iphone 11 Value fo... 24 5 Must buy! happy 💙 25 **Brilliant** Best phone **Brilliant** 26 5 Perfect iPhone on this budget!! Camera and the... Perfect product! 27 Battery backup is extraordinary, camera is dec... 28 Worth every penny iPhone is delivered on time. Display is great ... 5 Classy product Outstanding performance this phone

Q6: Scrape data forfirst 100 sneakers you find whenyou visit flipkart.com and search

for "sneakers" inthe search field.

```
driver=webdriver.Chrome()
In [390...
          #1. Go to Flipkart webpage
In [391...
          driver.get('https://www.flipkart.com/search?q=sneakers&otracker=search&otracker1=searc
          #2. Scraping attributes of each sneaker: Brand and Price
In [407...
          brand_name=[]
          Product_price=[]
          #3. for page range
           start=0
          end=3
          for page in range (start,end):
          #4. scrape first 100 brand and price of shoes
               brand=driver.find_elements(By.XPATH, '//div[@class="_2WkVRV"]')
               for x in brand:
                   brand_name.append(x.text)
               price=driver.find_elements(By.XPATH, '//div[@class="_30jeq3"]')
               for x in price:
                   Product price.append(x.text)
               next_button=driver.find_element(By.XPATH,'/html/body/div/div/div[3]/div[1]/div[2]/
               next_button.click()
               time.sleep(3)
          #5. Finally create a dataframe of the scraped data
In [410...
          df=pd.DataFrame({'brand_name':brand_name,'Product_price':Product_price})
          df[0:100]
```

Out[410]:		brand_name	Product_price
	0	Layasa	₹399
	1	Sparx	₹659
	2	BRUTON	₹299
	3	Nobelite	₹299
	4	DUCATI	₹287
	•••		
	95	Peelu	₹719
	96	Layasa	₹399
	97	New Balance	₹7,699
	98	New Balance	₹5,000
	99	Skechers	₹4,649

100 rows × 2 columns

Q7: Go to webpage https://www.amazon.in/ 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:

```
driver=webdriver.Chrome()
In [413...
          #1. Go to amazon webpage
In [415...
          driver.get('https://www.amazon.in/')
In [421...
          #2. type 'laptop' on searchbar
          search=driver.find element(By.XPATH, '/html/body/div[1]/header/div/div[1]/div[2]/div/fd
           search.send keys('laptop')
           #3. clicking on submit button
           submit=driver.find_element(By.XPATH,'/html/body/div[1]/header/div/div[1]/div[2]/div/fd
           submit.click()
           #4. clicked on i7 filter
           submit_i7=driver.find_element(By.XPATH,'/html/body/div[1]/div[2]/div[1]/div[2]/div/div
           submit i7.click()
          #5. scrape first 10 laptops titles
In [431...
          laptop title=[]
          title=driver.find_elements(By.XPATH,'//h2[@class="a-size-mini a-spacing-none a-color-t
           for x in title:
               laptop_title.append(x.text)
```

```
#6. scrape first 10 laptops ratings
            laptop ratings=[]
            ratings=driver.find_elements(By.XPATH,'//span[@class="a-size-base puis-normal-weight-t
            for x in ratings:
                 laptop ratings.append(x.text)
            #7. scrape first 10 laptops price
            laptop price=[]
            price=driver.find_elements(By.XPATH,'//span[@class="a-price-whole"]')[0:10]
            for x in price:
                 laptop_price.append(x.text)
In [432...
            #8. Finally create a dataframe of the scraped data
            df=pd.DataFrame({'laptop_title':laptop_title,'laptop_ratings':laptop_ratings,'laptop_r
            df
Out[432]:
                                                 laptop_title laptop_ratings laptop_price
               Acer Nitro 5 12th Gen Intel Core i7-12650H Gam...
                                                                        4.1
                                                                                 1,04,990
                 Lenovo [SmartChoice] IdeaPad Slim 3 Intel Core...
            1
                                                                        3.3
                                                                                  62,990
            2 ASUS Vivobook 15, Intel Core i7-12650H 12th Ge...
                                                                        4.0
                                                                                  59,990
            3
                   Dell Inspiron 5430 13th Gen Laptop, Intel i7-1...
                                                                        3.2
                                                                                  86,249
               MSI GF63 Thin, Intel Core i7-11800H, 40CM FHD ...
                                                                        4.5
                                                                                  70,990
            5
                                                                                  62,990
                 Lenovo [SmartChoice] IdeaPad Slim 3 Intel Core...
                                                                        3.3
               ASUS Creator Series Vivobook 14X OLED (2023), ...
                                                                        3.5
                                                                                  85,990
            7
                  Dell Inspiron 5630 13th Gen Laptop, Intel Core...
                                                                        4.5
                                                                                  89,990
            8 ASUS TUF Gaming F15 (2023) 90WHr Battery, Inte...
                                                                        4.2
                                                                                 1,15,990
```

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

4.3

85,990

```
driver=webdriver.Chrome()
In [436...
           #1. First get the webpagehttps://www.azquotes.com
In [437...
           driver.get('http://www.azquotes.com/')
           #2. Click on TopQuotes
In [439...
           click_on_top_quotes=driver.find_element(By.XPATH,'/html/body/div[1]/div[1]/div[1]/div
           click on top quotes.click()
          #3. Than scrap a) Quote b) Author c) Type Of Quotes
In [491...
           start=0
           end=3
           for page in range (start,end):
               quotes_types=[]
               types=driver.find elements(By.XPATH,'//div[@class="tags"]')[0:200]
               for x in types:
```

ASUS Creator Series Vivobook 14X OLED (2023), ...

```
quotes_types.append(x.text)

top_quotes=[]
quotes=driver.find_elements(By.XPATH,'//a[@class="title"]')[0:200]
for x in quotes:
    top_quotes.append(x.text)

Author_list=[]
types=driver.find_elements(By.XPATH,'//div[@class="author"]')[0:200]
for x in types:
    Author_list.append(x.text)

next_click=driver.find_element(By.XPATH,'/html/body/div[1]/div[2]/div/div/div/next_click.click()
time.sleep(3)
```

In [492...

#4. Finally create a dataframe of the scraped data
df=pd.DataFrame({'top_quotes':top_quotes,'Author_list':Author_list,'quotes_types':quot
df

\cap	+	Γ	/1	Ω	7	٦	
Оu	L	L	+	J	_	J	۰

	top_quotes	Author_list	quotes_types
0	A man is not old until regrets take the place	John Barrymore	Love, Inspirational, Life
1	A part of kindness consists in loving people m	Joseph Joubert	Love, Kindness, Women
2	When you start to develop your powers of empat	Susan Sarandon	Kindness, Power, Imagination
3	Judge a man by his questions rather than his a	Voltaire	Wisdom, Clever, Men
4	If you make a sale, you can make a living. If	Jim Rohn	Inspirational, Business, Investment
•••			
95	All things are difficult before they are easy.	Thomas Fuller	Inspirational, Motivational, Positive
96	People ask the difference between a leader and	Theodore Roosevelt	Leadership, Differences, People
97	The thing that is really hard, and really amaz	Anna Quindlen	Confidence, Letting Go, Being Yourself
98	Love is the ability and willingness to allow t	Wayne Dyer	Love, Anxiety, Self Improvement
99	Sooner or later, those who win are those who t	Paul Tournier	Positive, Sports, Confidence

100 rows × 3 columns

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 https://www.jagranjosh.com/.

```
In [495... driver=webdriver.Chrome()
In [496... #1. First get the webpagehttps://www.jagranjosh.com/
driver.get('http://www.jagranjosh.com/')
In [497... #2. Then You have to click on the GK option
    click_gk=driver.find_element(By.XPATH,'/html/body/div/header/nav/div/div/div[3]/ul/li[click_gk.click()

In [498... #3. Then click on the List of all Prime Ministers of India
    click_PM_list=driver.find_element(By.XPATH,'/html/body/div[1]/div/div/div[2]/div/div[1]
    click_PM_list.click()
In []: # no class name XPATH FOUND FOR ANY Name, Born-Dead, Term of office, Remarks
```

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/

```
driver=webdriver.Chrome()
In [544...
         #1. First get the webpage https://www.motor1.com/
In [545...
         driver.get('https://www.motor1.com/')
         #2. Then You have to type in the search bar '50 most expensive cars'
In [547...
         type 50 most expensive cars=driver.find element(By.XPATH, '/html/body/div[10]/div[2]/di
         type_50_most_expensive_cars.send_keys('50 most expensive cars')
         #3. click on submit
In [548...
          submit=driver.find element(By.XPATH,'/html/body/div[10]/div[2]/div/div/div[3]/div/div/
          submit.click()
In [549...
         #4. click on 50 most expensive carsin the world
         click tab.click()
         #5. scraping car name(but price was not scrapable)
In [552...
         car name=[]
         name=driver.find_elements(By.XPATH,'//h3[@class="subheader"]')
         for x in name:
             car name.append(x.text)
In [557...
         #6. Finally create a dataframe of the scraped data
         df=pd.DataFrame({'car_name':car_name})
          df
```

Out[557]:

car_name

	car_name
0	Aston Martin Valour
1	McLaren Elva
2	Czinger 21C
3	Ferrari Monza
4	Gordon Murray T.33
5	Koenigsegg Gemera
6	Zenvo TSR-S
7	Hennessey Venom F5
8	Bentley Bacalar
9	Hispano Suiza Carmen Boulogne
10	Bentley Mulliner Batur
11	Deus Vayanne
12	SSC Tuatara
13	Lotus Evija
14	Aston Martin Vulcan
15	Delage D12
16	Ferrari Daytona SP3
17	McLaren Speedtail
18	Rimac Nevera
19	Pagani Utopia
20	Pininfarina Battista
21	Gordon Murray T.50
22	Lamborghini Countach
23	Mercedes-AMG Project One
24	Zenvo Aurora
25	Aston Martin Victor
26	Hennessey Venom F5 Roadster
27	Koenigsegg Jesko
28	Aston Martin Valkyrie
29	W Motors Lykan Hypersport
30	McLaren Solus
31	Lamborghini Sian
32	Koenigsegg CC850

car_name

33	Bugatti Chiron Super Sport 300+
34	Lamborghini Veneno
35	Bugatti Bolide
36	Pininfarina B95 Speedster
37	Bugatti Mistral
38	Pagani Huayra Imola
39	Bugatti Divo
40	SP Automotive Chaos
41	Pagani Codalunga
42	777 Hypercar
43	Mercedes-Maybach Exelero
44	Bugatti Centodieci
45	Bugatti Chiron Profilée
46	Rolls-Royce Sweptail
47	Bugatti La Voiture Noire
48	Rolls-Royce Boat Tail*
49	Rolls-Royce La Rose Noire Droptail
50	Most Expensive Cars In The World

FND	 	

In []: