In [1]:
```
# Make sure Selenium is installed and Chromedriver is downloaded.
!pip install selenium
```

```
Requirement already satisfied: selenium in ./opt/anaconda3/lib/python3.9/site-packages (4.9.1)
Requirement already satisfied: trio~=0.17 in ./opt/anaconda3/lib/python3.9/site-packages (from selenium) (0.22.0)
Requirement already satisfied: urllib3[socks]<3,>=1.26 in ./opt/anaconda3/lib/python3.9/site-packages (from selenium) (1.26.7)
Requirement already satisfied: trio-websocket~=0.9 in ./opt/anaconda3/lib/python3.9/site-packages (from selenium) (0.10.2)
Requirement already satisfied: certifi>=2021.10.8 in ./opt/anaconda3/lib/python3.9/site-packages (from selenium) (2021.10.8)
Requirement already satisfied: sortedcontainers in ./opt/anaconda3/lib/python3.9/site-packages (from trio~=0.17->selenium) (2.4.0)
Requirement already satisfied: sniffio in ./opt/anaconda3/lib/python3.9/site-packages (from trio~=0.17->selenium) (1.2.0)
Requirement already satisfied: attrs>=19.2.0 in ./opt/anaconda3/lib/python3.9/site-packages (from trio~=0.17->selenium) (21.2.0)
Requirement already satisfied: exceptiongroup>=1.0.0rc9 in ./opt/anaconda3/lib/python3.9/site-packages (from trio~=0.17->selenium) (1.1.1)
Requirement already satisfied: outcome in ./opt/anaconda3/lib/python3.9/site-packages (from trio~=0.17->selenium) (1.2.0)
Requirement already satisfied: async-generator>=1.9 in ./opt/anaconda3/lib/python3.9/site-packages (from trio~=0.17->selenium) (1.10)
Requirement already satisfied: idna in ./opt/anaconda3/lib/python3.9/site-packages (from trio~=0.17->selenium) (3.2)
Requirement already satisfied: wsproto>=0.14 in ./opt/anaconda3/lib/python3.9/site-packages (from trio-websocket~=0.9->selenium) (1.2.0)
Requirement already satisfied: PySocks!=1.5.7,<2.0,>=1.5.6 in ./opt/anaconda3/lib/python3.9/site-packages (from urllib3[socks]<3,>=1.26->s
elenium) (1.7.1)
Requirement already satisfied: h11<1,>=0.9.0 in ./opt/anaconda3/lib/python3.9/site-packages (from wsproto>=0.14->trio-websocket~=0.9->sele
nium) (0.14.0)
```

In [2]:
```
# Import important libraries
import selenium
import pandas as pd
from selenium import webdriver
import warnings
warnings.filterwarnings('ignore')
from selenium.webdriver.common.by import By
from selenium.webdriver.support import expected_conditions as EC
from selenium.webdriver.support.ui import WebDriverWait
import time
```

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.

This task will be done in following steps:

1. First get the webpage https://www.naukri.com/
2. Enter “Data Analyst” in “Skill, Designations, Companies” field and enter “Bangalore” in “enter the location” field.
3. Then click the searchbutton.
4. Then scrape the data for the first 10 jobs results you get.
5. Finally create a dataframe of the scraped data. Note: All of the above steps have to be done in code. No step is to be done manually.

In [3]:
```
# Set up Chrome driver
driver = webdriver.Chrome()
```

In [4]:
```
# First get the webpage https://www.naukri.com/
driver.get('https://www.naukri.com/')
```

In [5]:
```
# Enter “Data Analyst” in “Skill, Designations, Companies” field and
# enter “Bangalore” in “enter the location” field.

designation =driver.find_element(By.CLASS_NAME,'suggestor-input')
designation.send_keys("Data Analyst")


location = driver.find_element(By.XPATH,'/html/body/div[1]/div[7]/div/div/div[5]/div/div/div/div[1]/div/input')
location.send_keys("Bangalore")
```

In [6]:
```
# Then click the searchbutton.
search = driver.find_element(By.CLASS_NAME,'qsbSubmit')
search.click()
```

In [8]:
```
# Then scrape the data for the first 10 jobs results you get.

data =[]

while len(data)<10:
    driver.find_element(By.XPATH,'//div[@class="list"]')

    title =driver.find_elements(By.XPATH,'//a[@class="title ellipsis"]')
    com_name =driver.find_elements(By.XPATH,'//a[@class="subTitle ellipsis fleft"]')
    exp =driver.find_elements(By.XPATH,'//span[@class="ellipsis fleft expwdth"]')
    sal=driver.find_elements(By.XPATH,'//span[@class="ellipsis fleft "]')
    loc=driver.find_elements(By.XPATH,'//span[@class="ellipsis fleft locWdth"]')
    jd=driver.find_elements(By.XPATH,'//div[@class="ellipsis job-description"]')
    skill=driver.find_elements(By.XPATH,'//ul[@class="tags has-description"]')
    date=driver.find_elements(By.XPATH,'//span[@class="fleft postedDate"]')
    url=driver.find_elements(By.XPATH,'//a[@class="title ellipsis"]')

    for i in range(len(title)):
        job_title = title[i].text
        company_name =com_name[i].text
        experience=exp[i].text
        salary=sal[i].text
        location=loc[i].text
        job_description=jd[i].text
        skills=skill[i].text
        posted_date=date[i].text
        job_url=url[i].get_attribute('href')

        data.append([job_title,company_name,experience,salary,location,job_description,skills,posted_date,job_url])

        if len(data)==10:
            break
```

In [9]:
```
#Finally create a dataframe of the scraped data

naukri = pd.DataFrame(data,columns=['Job_title','Company_name','Experience','Salary',
                                    'Location','Job_description','Skills','Posted_date',
                                    'Job_URL'])

## for job_url making the column clickable.

def make_clickable(val):
    # target _blank to open new window
    return '<a target="_blank" href="{}">{}</a>'.format(val, val)

## display dataframe
naukri.style.format({'Job_URL': make_clickable})
```

Out[9]:

	Job_title	Company_name	Experience	Salary	Location	Job_description	Skills	Posted_date	Job_URL
0	Data Analyst	Target	2-4 Yrs	Not disclosed	Bangalore/Bengaluru	BTech / BE or Masters in Statistics Based on this understanding, you are expected to id...	PLSQL Data analytics Data analysis Data Supply Econometrics Logistic regression Regression	1 Day Ago	https://www.naukri.com/job-listings-data-analyst-target-corporation-india-pvt-ltd-bangalore-bengaluru-2-to-4-years-030623500876
1	Tech Data Analyst	Wipro	3-6 Yrs	10-16 Lacs PA	Hybrid - Bangalore/ Bengaluru, Karnataka, Gurgaon/ Gurugram, Haryana	Experience with Business Requirements definition and management, structured analysis, p...	Tableau Data Analytics Python sql Technical analysis Data Transformation Data analysis Bi	9 Days Ago	https://www.naukri.com/job-listings-tech-data-analyst-wipro-gurgaon-gurugram-haryana-bangalore-bengaluru-karnataka-3-to-6-years-260523007430
2	Data Analyst	Artech	5-8 Yrs	7-17 Lacs PA	Bangalore/ Bengaluru, Karnataka	Review existing documents, replicate the business rules for data analysis. Desired Cand...	Oracle plsql R data analysis unix shell scripting R Shiny Unix PLSQL JIRA	2 Days Ago	https://www.naukri.com/job-listings-data-analyst-artech-bangalore-bengaluru-karnataka-5-to-8-years-230523003606
3	Data Analyst	Brunel	4-6 Yrs	Not disclosed	Bangalore/Bengaluru	Responsible for importing, cleansing, validating and analyzing data with the purpose of...	Analysis Excel VLOOKUP Data analysis Data Business analysis Data quality Powerpoint	3 Days Ago	https://www.naukri.com/job-listings-data-analyst-brunel-india-pvt-ltd-bangalore-bengaluru-4-to-6-years-310523501313
4	Celonis & Salesforce Data Analyst	Hitachi Energy	3-6 Yrs	Not disclosed	Bangalore/Bengaluru, Chennai	Your background: . A minimum of 2 years working with Celonis as Data Analyst or Data En...	Improvement Intelligence Data analysis Data Business intelligence SQL Process CRM	3 Days Ago	https://www.naukri.com/job-listings-celonis-salesforce-data-analyst-hitachi-energy-chennai-bangalore-bengaluru-3-to-6-years-310523501890
5	Celonis & Salesforce Data Analyst	Hitachi Ltd.	2-7 Yrs	Not disclosed	Bangalore/Bengaluru	Your background: . A minimum of 2 years working with Celonis as Data Analyst or Data En...	Salesforce Improvement Analysis Analytical Data modeling Data analysis Process improvement Data	4 Days Ago	https://www.naukri.com/job-listings-celonis-salesforce-data-analyst-hitachi-ltd-bangalore-bengaluru-2-to-7-years-300523502251
6	Data Analyst	HARMAN	3-5 Yrs	7-17 Lacs PA	Hybrid - Bangalore/Bengaluru	Analytical ability - Must have a clear understanding and experience in extracting Insig...	ssms ms sql sql queries SQL Coding SQL Server Query Data analysis Coding	5 Days Ago	https://www.naukri.com/job-listings-data-analyst-harman-bangalore-bengaluru-3-to-5-years-300523006176
7	Data Analyst	Aon	6-9 Yrs	Not disclosed	Hybrid - Bangalore/Bengaluru, Delhi / NCR	Bachelors degree or equivalent work experience required Ability to handle projects with...	Alteryx Tableau sql Data Analysis Data analysis	6 Days Ago	https://www.naukri.com/job-listings-data-analyst-aon-bangalore-bengaluru-delhi-ncr-6-to-9-years-300123010205
8	Data Analyst	Aon	6-9 Yrs	Not disclosed	Hybrid - Bangalore/Bengaluru, Delhi / NCR	Bachelors degree or equivalent work experience required Ability to handle projects with...	data analysis Alteryx SQL Tableau Analysis Data	6 Days Ago	https://www.naukri.com/job-listings-data-analyst-aon-bangalore-bengaluru-delhi-ncr-6-to-9-years-130223006774
9	Data Analyst	Tata Consultancy Services (TCS)	5-10 Yrs	Not disclosed	Bangalore/Bengaluru, Kolkata, Hyderabad/Secunderabad, Pune, Chennai, Delhi / NCR	Roles and Responsibilities Desired Candidate Profile Perks and Benefits	Analysis Data Data analysis	3 Days Ago	https://www.naukri.com/job-listings-data-analyst-tata-consultancy-services-tcs-kolkata-hyderabad-secunderabad-pune-chennai-bangalore-bengaluru-delhi-ncr-5-to-10-years-010623007338

In [10]:
```
driver.quit()
```

2. 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:

1. First get the webpage https://www.naukri.com/
2. Enter “Data Scientist” in “Skill, Designations, Companies” field and enter “Bangalore” in “enter the location” field.
3. Then click the searchbutton.
4. Then scrape the data for the first 10 jobs results youget.
5. Finally create a dataframe of the scraped data.

In [11]:
```
# Set up Chrome driver
driver = webdriver.Chrome()
```

In [12]:
```
# First get the webpage https://www.naukri.com/
driver.get('https://www.naukri.com/')
```

In [13]:
```
# Enter “Data Scientist” in “Skill, Designations, Companies” field and
# enter “Bangalore” in “enter the location” field.

designation =driver.find_element(By.CLASS_NAME,'suggestor-input')
designation.send_keys("Data Scientist")


location = driver.find_element(By.XPATH,'/html/body/div[1]/div[7]/div/div/div[5]/div/div/div/div[1]/div/input')
location.send_keys("Bangalore")
```

In [14]:
```
# Then click the searchbutton.
search = driver.find_element(By.CLASS_NAME,'qsbSubmit')
search.click()
```

In [15]:
```
# Then scrape the data for the first 10 jobs results you get.

data =[]

while len(data)<10:
    driver.find_element(By.XPATH,'//div[@class="list"]')

    title =driver.find_elements(By.XPATH,'//a[@class="title ellipsis"]')
    com_name =driver.find_elements(By.XPATH,'//a[@class="subTitle ellipsis fleft"]')
    exp =driver.find_elements(By.XPATH,'//span[@class="ellipsis fleft expwdth"]')
    sal=driver.find_elements(By.XPATH,'//span[@class="ellipsis fleft "]')
    loc=driver.find_elements(By.XPATH,'//span[@class="ellipsis fleft locWdth"]')
    jd=driver.find_elements(By.XPATH,'//div[@class="ellipsis job-description"]')
    skill=driver.find_elements(By.XPATH,'//ul[@class="tags has-description"]')
    date=driver.find_elements(By.XPATH,'//span[@class="fleft postedDate"]')
    url=driver.find_elements(By.XPATH,'//a[@class="title ellipsis"]')

    for i in range(len(title)):
        job_title = title[i].text
        company_name =com_name[i].text
        experience=exp[i].text
        salary=sal[i].text
        location=loc[i].text
        job_description=jd[i].text
        skills=skill[i].text
        posted_date=date[i].text
        job_url=url[i].get_attribute('href')

        data.append([job_title,company_name,experience,salary,location,job_description,skills,posted_date,job_url])

        if len(data)==10:
            break
```

In [16]:
```
#Finally create a dataframe of the scraped data

naukri2 = pd.DataFrame(data,columns=['Job_title','Company_name','Experience','Salary',
                                     'Location','Job_description','Skills','Posted_date',
                                     'Job_URL'])

## for job_url making the column clickable.


## display dataframe
naukri2.style.format({'Job_URL': make_clickable})
```

Out[16]:

	Job_title	Company_name	Experience	Salary	Location	Job_description	Skills	Posted_date	
0	Permanent Opportunity - Data Scientist(Snaplogic&Snowflake), Pan India	Deloitte	9-14 Yrs	18-30 Lacs PA	Hybrid - Bangalore/Bengaluru, Kolkata, Hyderabad/Secunderabad, Pune, Ahmedabad, Chennai, Delhi / NCR, Mumbai (All Areas)	ETL: Having minimum 2+ years of experience in SnapLogic . Database: Minimum 2+ years of...	snowflake data validation Snaplogic Data Pan	11 Days Ago	https://www.naukri listings-pe opportunity-data- snaplogic-snowfl india-deloitte hyderabad-secun pune-ahmedabad- bangalore-bengalu ncr-mumbai-all-are 14-years-24052
1	Analystics & Modeling Specialist	Accenture	6-8 Yrs	Not disclosed	Bangalore/Bengaluru, Kolkata, Mumbai, Hyderabad/Secunderabad, Pune, Chennai	This role will be a part of Survey Solutions and Analytics team. The Analytics and Mode...	Bfsi Consulting Machine learning Open source Python machine research data	17 Days Ago	https://www.naukri listings-ar modeling-s accenture-kolkata- hyderabad-secun pune-chennai-b bengaluru-6-to- 13022
2	Machine Learning (AI) Architect	Persistent	5-12 Yrs	Not disclosed	Bangalore/Bengaluru, Kolkata, Mumbai, New Delhi, Hyderabad/Secunderabad, Pune, Chennai	Qualifications Skills: BE/ BTech degree in Computer Science or equivalent from a repute...	Architecture Intelligence Time Networking Troubleshooting Time series Employee engagement Machine learning	30+ Days Ago	https://www.naukri listings-machine- ai-architect-p systems-limited mumbai-n hyderabad-secun pune-chennai-b bengaluru-5-to- 10032
3	Staff Data Scientist	Walmart	6-8 Yrs	Not disclosed	Bangalore/Bengaluru	Outlined below are the required minimum qualifications for this positionMinimum Qualifi...	Operations Mathematics Economics Technology SEZ Data Statistics Information technology	1 Day Ago	https://www.naukri listings-st scientist-walm bangalore-bengal 8-years-02062
4	Data Scientist	Tata Consultancy Services (TCS)	4-8 Yrs	5-14 Lacs PA	Bangalore/ Bengaluru, Karnataka	JD for Data Scientist: . MFG domain experience as a Data Scientist (Sr. level preferabl...	Python Data Science Machine learning Data Machine Science	2 Days Ago	https://www.naukri listings-data-scier consultancy-serv bangalore-b karnataka-4-to- 02062
5	Hiring For Data Scientist	Tata Consultancy Services (TCS)	4-9 Yrs	Not disclosed	Hybrid - Bangalore/ Bengaluru, Karnataka, Hyderabad/ Secunderabad, Telangana, Chennai, Tamil Nadu	Roles and Responsibilities Role: Data ScientistExp: 4 to 10 YearsSkills:Programming Lan...	Data Science machine learning Languages Natural language processing Processing Data Linear Regression Process	5 Days Ago	https://www.naukri listings-hiring- scientist-tata-con services-tcs-hy secunderabad-te chennai-tar bangalore-b karnataka-4-to- 29052
6	Data Scientist	Infogain	3-6 Yrs	Not disclosed	Hybrid - Bangalore/Bengaluru, Pune, Delhi / NCR, Mumbai (All Areas)	Roles and Responsibilities Conceptualize, design and deliver high-quality solutions and...	data science data statistics science machine learning machine	25 Days Ago	https://www.naukri listings-data- infogain-pune-b bengaluru-c mumbai-all-areas years-10052
7	Director/Senior Director - Data Science	Axtria India	10-15 Yrs	Not disclosed	Bangalore/Bengaluru, Noida, Hyderabad/Secunderabad, Pune, Gurgaon/Gurugram	Familiarity with cloud technology such as AWS Azure and knowledge of AWS tools such as ...	Data Science R Data modeling R Shiny Shiny Quality Natural language processing Tensorflow	10 Days Ago	https://www.naukri listings-directo director-data- axtria-india-pvt-l hyderabad-secun pune-gurgaon-g bangalore-beng to-15-years-24052
8	Manager/Senior Manager - Data Science	Axtria India	8-12 Yrs	Not disclosed	Bangalore/Bengaluru, Noida, Hyderabad/Secunderabad, Pune, Gurgaon/Gurugram	Ability to build scalable models using Python, R-Studio, R Shiny, PySpark, Keras, Tenso...	Data Science Intelligence Data management Algorithms Natural language processing Machine learning Python Modeling	11 Days Ago	https://www.naukri listings-manage manager-data- axtria-india-pvt-l hyderabad-secun pune-gurgaon-g bangalore-bengal 12-years-24052
9	Data Scientist	Ericsson	5-7 Yrs	Not disclosed	Bangalore/Bengaluru	Experience in statistical learning: Predictive Prescriptive Analytics, Web Analytics, P...	Warehouse Analytics Analytical Development Data Machine Data warehousing SQL	3 Days Ago	https://www.naukri listings-data- ericsson-indi services-pvt-ltd-b bengaluru-5-to- 31052

In [17]:
```
driver.quit()
```

3. In this question you have to scrape data using the filters available on the webpage as shown below:

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 The task will be done as shown in the below steps:

1. first get thewebpage https://www.naukri.com/
2. Enter “Data Scientist” in “Skill, Designations, and Companies” field.
3. Then click the searchbutton.
4. Then apply the location filter and salary filter by checking the respective boxes
5. Then scrape the data for the first 10 jobs results youget.
6. Finally create a dataframe of the scraped data.

In [18]:
```
# Set up Chrome driver
driver = webdriver.Chrome()
```

In [19]:
```
# First get the webpage https://www.naukri.com/
driver.get('https://www.naukri.com/')
```

In [20]:
```
# Enter “Data Scientist” in “Skill, Designations, Companies” field

designation =driver.find_element(By.CLASS_NAME,'suggestor-input')
designation.send_keys("Data Scientist")
```

In [21]:
```
# Then click the searchbutton.
search = driver.find_element(By.CLASS_NAME,'qsbSubmit')
search.click()
```

In [22]:
```
#4. Then apply the location filter and salary filter by checking the respective boxes.

#location filter to be used is “Delhi/NCR”.

driver.find_element(By.XPATH,"//span[contains(text(),'Delhi / NCR')]").click()
```

In [23]:
```
#The salary filter to be used is “3-6” lakhs

driver.find_element(By.XPATH,"//span[contains(text(),'3-6 Lakhs')]").click()
```

In [24]:
```
#You have to scrape the job-title, job-location, company name, experience required
#Then scrape the data for the first 10 jobs results youget.


data =[]

while len(data)<10:
    driver.find_element(By.XPATH,'//div[@class="list"]')

    title =driver.find_elements(By.XPATH,'//a[@class="title ellipsis"]')
    com_name =driver.find_elements(By.XPATH,'//a[@class="subTitle ellipsis fleft"]')
    exp =driver.find_elements(By.XPATH,'//span[@class="ellipsis fleft expwdth"]')
    sal=driver.find_elements(By.XPATH,'//span[@class="ellipsis fleft "]')
    loc=driver.find_elements(By.XPATH,'//span[@class="ellipsis fleft locWdth"]')
    url=driver.find_elements(By.XPATH,'//a[@class="title ellipsis"]')

    for i in range(len(title)):
        job_title = title[i].text
        company_name =com_name[i].text
        experience=exp[i].text
        salary=sal[i].text
        location=loc[i].text
        job_url=url[i].get_attribute('href')

        data.append([job_title,company_name,experience,salary,location,job_url])

        if len(data)==10:
            break
```

In [25]:
```
#Finally create a dataframe of the scraped data

naukri3 = pd.DataFrame(data,columns=['Job_title','Company_name','Experience','Salary',
                                     'Location','Job_URL'])

## for job_url making the column clickable.


## display dataframe
naukri3.style.format({'Job_URL': make_clickable})
```

Out[25]:

	Job_title	Company_name	Experience	Salary	Location	Job_URL
0	Junior Data Scientist	Analytos	0-2 Yrs	Not disclosed	Kolkata, Mumbai, New Delhi, Hyderabad/Secunderabad, Pune, Chennai, Bangalore/Bengaluru	https://www.naukri.com/job-listings-junior-data-scientist-analytos-kolkata-mumbai-new-delhi-hyderabad-secunderabad-pune-chennai-bangalore-bengaluru-0-to-2-years-221118500005
1	Data Scientist	Blackbuck	3-7 Yrs	Not disclosed	Gurgaon/Gurugram, Bangalore/Bengaluru	https://www.naukri.com/job-listings-data-scientist-blackbuck-gurgaon-gurugram-bangalore-bengaluru-3-to-7-years-170119500435
2	Data Scientist	Jubilant Ingrevia Limited	3-8 Yrs	Not disclosed	Noida	https://www.naukri.com/job-listings-data-scientist-jubilant-ingrevia-limited-noida-3-to-8-years-020623501068
3	Data Scientist	Analytos	2-4 Yrs	Not disclosed	Kolkata, Mumbai, New Delhi, Hyderabad/Secunderabad, Pune, Chennai, Bangalore/Bengaluru	https://www.naukri.com/job-listings-data-scientist-analytos-kolkata-mumbai-new-delhi-hyderabad-secunderabad-pune-chennai-bangalore-bengaluru-2-to-4-years-221118500006
4	Python and ML Trainer	Thescholar	3-8 Yrs	Not disclosed	Hyderabad/Secunderabad, New Delhi, Pune, Gurgaon/Gurugram, Bangalore/Bengaluru	https://www.naukri.com/job-listings-python-and-ml-trainer-thescholar-hyderabad-secunderabad-new-delhi-pune-gurgaon-gurugram-bangalore-bengaluru-3-to-8-years-300523501155
5	Data Scientist	Tata Consultancy Services (TCS)	7-12 Yrs	50,000-3 Lacs PA	Delhi / NCR	https://www.naukri.com/job-listings-data-scientist-tata-consultancy-services-tcs-delhi-ncr-7-to-12-years-270523004173
6	Intern	Tower Research Capital	0-1 Yrs	Not disclosed	Gurgaon/Gurugram	https://www.naukri.com/job-listings-intern-tower-research-capital-gurgaon-gurugram-0-to-1-years-200523500385
7	Lead Assistant Manager	EXL	2-6 Yrs	Not disclosed	Gurgaon/Gurugram	https://www.naukri.com/job-listings-lead-assistant-manager-exl-services-com-i-pvt-ltd-gurgaon-gurugram-2-to-6-years-240523500950
8	Data Scientist	Innovaccer	2-4 Yrs	Not disclosed	Noida	https://www.naukri.com/job-listings-data-scientist-innovaccer-noida-2-to-4-years-190523500429
9	Junior Data Scientist	Adidas	1-6 Yrs	Not disclosed	Gurgaon/Gurugram, United States (USA), Bulgaria	https://www.naukri.com/job-listings-junior-data-scientist-adidas-group-gurgaon-gurugram-united-states-usa-bulgaria-1-to-6-years-050423501537

In [26]:
```
driver.quit()
```

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

1. Brand
2. Product Description
3. Price The attributes which you have to scrape is ticked marked in the below image.

To scrape the data you have to go through following steps:

1. Go to Flipkart webpage by url : https://www.flipkart.com/
2. Enter “sunglasses” in the search field where “search for products, brands and more” is written and click the search icon
3. After that you will reach to the page having a lot of sunglasses. From this page you can scrap the required data asusual.
4. After scraping data from the first page, go to the “Next” Button at the bottom other page , then click on it.
5. Now scrape data from this page as usual
6. Repeat this until you get data for 100sunglasses

In [27]:
```
# Set up Chrome driver
driver = webdriver.Chrome()
```

In [28]:
```
# Go to Flipkart webpage by url : https://www.flipkart.com/
driver.get('https://www.flipkart.com/')
```

In [29]:
```
# close login if popup appears

try:
    close_button = driver.find_element(By.XPATH,'//button[@class="_2KpZ6l _2doB4z"]')
    close_button.click()
except:
    pass
```

In [30]:
```
# Enter “sunglasses” in the search field where “search for products, brands and more” is written and click the search icon

search =driver.find_element(By.CLASS_NAME,'_3704LK')
search.send_keys("sunglasses")
driver.find_element(By.CLASS_NAME,'L0Z3Pu').click()
```

In [31]:
```
# After that you will reach to the page having a lot of sunglasses. From this page you can scrap the required data asusual.

start =0 # defining start, end to iterirate the loop.
end = 6

from selenium.common.exceptions import StaleElementReferenceException

# Scrapping the required attributes using XPATH.
brand_name=[]
desc=[]
price=[]

for page in range(start,end):
    try:

        tags = driver.find_elements(By.XPATH,'//div[@class="_2WkVRV"]')
        for i in tags:
            tag = i.text
            brand_name.append(tag)


        tags = driver.find_elements(By.XPATH,'//a[@class="IRpwTa"]')
        for i in tags:
            tag = i.text
            desc.append(tag)


        tags = driver.find_elements(By.XPATH,'//div[@class="_30jeq3"]')
        for i in tags:
            tag = i.text
            price.append(tag)
    except StaleElementReferenceException:
        continue
  # After scraping data from the first page, go to the “Next” Button at the bottom other page , then click on it.

    driver.find_element(By.XPATH,'//a[span[text()="Next"]]').click()
        # Wait for the next page to load
```

In [32]:
```
sunglasses = pd.DataFrame(list(zip(brand_name[:100],desc[:100],price[:100])),columns=['Brand_name','Product_description','Price'])
sunglasses
```

Out[32]:

	Brand_name	Product_description	Price
0	VINCENT CHASE	by Lenskart Polarized, UV Protection Retro Squ...	₹849
1	VINCENT CHASE	by Lenskart Polarized, UV Protection Wayfarer ...	₹688
2	Fastrack	UV Protection Rectangular Sunglasses (Free Size)	₹499
3	BKGE	Polarized, UV Protection Retro Square Sunglass...	₹149
4	Elligator	UV Protection, Mirrored Wayfarer Sunglasses (54)	₹179
...	...	...	...
95	PIRASO	by Lenskart Polarized, UV Protection Round Sun...	₹1,759
96	VINCENT CHASE	UV Protection Cat-eye Sunglasses (Free Size)	₹873
97	Fastrack	UV Protection, Gradient Butterfly, Shield Sung...	₹195
98	NuVew	Toughened Glass Lens, UV Protection Wayfarer, ...	₹399
99	METRONAUT	UV Protection, Polarized, Mirrored Wayfarer Su...	₹748

100 rows × 3 columns

In [33]:
```
driver.quit()
```

5. Scrape 100 reviews data from flipkart.com for iphone11 phone. You have to go the link: https://www.flipkart.com/apple-iphone-11-black-64-gb/product-reviews/itm4e5041ba101fd?pid=MOBFWQ6BXGJCEYNY&lid=LSTMOBFWQ6BXGJCEYNYZXSHRJ&marketplace=FLIPKART.

As shown in the above page you have to scrape the tick marked attributes. These are: Rating Review summary Full review You have to scrape this data for first 100reviews.

In [34]:
```
## Set up Chrome driver

driver =webdriver.Chrome(r'chromedriver.exe')
```

In [35]:
```
## Go to the given link

driver.get('https://www.flipkart.com/apple-iphone-11-black-64-gb/product-reviews/itm4e5041ba101fd?pid=MOBFWQ6BXGJCEYNY&lid=LSTMOBFWQ6BXGJC
```

In [36]:
```
## Scrapping the data

## creating empty lists to save the records
rating=[]
Review_summary=[]
Full_review=[]

for page in range(1,12,1):
    ## for next button link chaging page link as per loop.
    url = 'https://www.flipkart.com/apple-iphone-11-black-64-gb/product-reviews/itm4e5041ba101fd?pid=MOBFWQ6BXGJCEYNY&lid=LSTMOBFWQ6BXGJCE
    driver.get(url)

    tags = driver.find_elements(By.XPATH,'//div[@class="_3LWZlK _1BLPMq"]')
    for i in tags:
        tag = i.text
        rating.append(tag)


    tags = driver.find_elements(By.XPATH,'//p[@class="_2-N8zT"]')
    for i in tags:
        tag = i.text
        Review_summary.append(tag)


    tags = driver.find_elements(By.XPATH,'//div[@class="t-ZTKy"]')
    for i in tags:
        tag = i.text
        Full_review.append(tag)

    time.sleep(4)
```

In [37]:
```
## In the dataframe
iphone_review =pd.DataFrame(list(zip(rating[0:100],Review_summary[0:100],Full_review[0:100])),
                            columns=["Rating","Review Summary","Full Review"])
```

In [38]:
```
iphone_review
```

Out[38]:

	Rating	Review Summary	Full Review
0	5	Simply awesome	Really satisfied with the Product I received.....
1	5	Perfect product!	Amazing phone with great cameras and better ba...
2	5	Best in the market!	Great iPhone very snappy experience as apple k...
3	4	Value-for-money	I'm Really happy with the product\nDelivery wa...
4	5	Highly recommended	It's my first time to use iOS phone and I am l...
...	...	...	...
95	5	Terrific purchase	finally an iPhone with very nice battery backu...
96	5	Good quality product	I'm switching this phone to oppo reno 10x zoom...
97	4	Wonderful	Its good.. a little heavy on my pinky but its ...
98	4	Terrific	Simply Awesome\n\nI have upgraded from iPhone ...
99	5	Best in the market!	Damn this phone is a blast . Upgraded from and...

100 rows × 3 columns

In [39]:
```
driver.quit()
```

6.Scrape data for first 100 sneakers you find when you visit flipkart.com and search for “sneakers” in the search field.

You have to scrape 3 attributes of each sneaker:

1. Brand
2. Product Description
3. Price As shown in the below image, you have to scrape the above attributes.

In [40]:
```
## Setting up the driver
driver =webdriver.Chrome(r'chromedriver.exe')
```

In [41]:
```
## Opening flipkart
driver.get('https://www.flipkart.com/')
```

In [42]:
```
## CLosing the pop up window

try:
    close_button = driver.find_element(By.XPATH,'//button[@class="_2KpZ6l _2doB4z"]')
    close_button.click()
except:
    pass
```

In [43]:
```
## Search "Sneakers" using search engine
search =driver.find_element(By.CLASS_NAME,'_3704LK')
search.send_keys("sneakers")
driver.find_element(By.CLASS_NAME,'L0Z3Pu').click()
```

In [44]:
```
## Scrap data
brand_name=[]
desc=[]
price=[]

for page in range(1,4):


    tags = driver.find_elements(By.XPATH,'//div[@class="_2WkVRV"]')
    for i in tags:
        tag = i.text
        brand_name.append(tag)


    tags = driver.find_elements(By.XPATH,'//a[@class="IRpwTa"]')
    for i in tags:
        tag = i.text
        desc.append(tag)


    tags = driver.find_elements(By.XPATH,'//div[@class="_30jeq3"]')
    for i in tags:
        tag = i.text
        price.append(tag)

    next_button=driver.find_element(By.XPATH,'//a[@class="_1LKTO3"]')
    driver.execute_script("arguments[0].click();", next_button)

    time.sleep(4)
```

In [45]:
```
## display the liss of data in dataframe

sneakers = pd.DataFrame(list(zip(brand_name[0:100],desc[0:100],price[0:100])),
                        columns=["Brand Name","Product Description","Price"])
sneakers
```

Out[45]:

	Brand Name	Product Description	Price
0	HOTSTYLE	Combo Pack Of 2 Sneakers For Men	₹429
1	SFR	Mid-Top Combo Pack of 02 Pairs Lace-ups Traine...	₹379
2	Labbin	Sneakers For Men	₹349
3	PUMA	Buzz Sneakers For Men	₹1,149
4	PUMA	Player Sneakers For Men	₹1,074
...	...	...	...
95	HRX by Hrithik Roshan	Running Shoes,Sports Shoes for Women|Memory Fo...	₹1,109
96	Xtoon	Lightweight,Comfort,Summer,Trendy,Walking,Outd...	₹499
97	Lee Won	Hustle V2 Sneakers For Men	₹259
98	HRX by Hrithik Roshan	Fashion and Stylish Soft Ultralight Lace Up Sn...	₹1,047
99	PUMA	Sneakers For Men	₹4,421

100 rows × 3 columns

In [46]:
```
## close the driver
driver.quit()
```

7. 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:

After setting the filters scrape first 10 laptops data. You have to scrape 3 attributes for each laptop:

1. Title
2. Ratings
3. Price

In [47]:
```
## SEtting up the chrome browser
driver =webdriver.Chrome(r'chromedriver.exe')
```

In [48]:
```
## Open amazon.in

driver.get('https://www.amazon.in/')
```

In [49]:
```
# Find the search box and enter the search term
search_box = driver.find_element(By.ID,"twotabsearchtextbox")
search_box.send_keys("Laptop")
search_box.submit()
```

In [50]:
```
# Find the CPU filter and click on it
cpu_filter = driver.find_element(By.LINK_TEXT,"Intel Core i7")
cpu_filter.click()
```

In [51]:
```
## Scrap the data

Title=[]
Ratings=[]
Price=[]


tags = driver.find_elements(By.XPATH,'//span[@class="a-size-medium a-color-base a-text-normal"]')
for i in tags:
    tag = i.text
    Title.append(tag)


tags = driver.find_elements(By.XPATH,'//span[@class="a-size-base s-underline-text"]')
for i in tags:
    tag = i.text
    Ratings.append(tag)


tags = driver.find_elements(By.XPATH,'//span[@class="a-price-whole"]')
for i in tags:
    tag = i.text
    Price.append(tag)
```

In [52]:
```
## display the data in dataframe

laptop=pd.DataFrame(list(zip(Title[0:10],Ratings[0:10],Price[0:10])),columns=["Title","Ratings","Price"])
laptop
```

Out[52]:

	Title	Ratings	Price
0	Lenovo ThinkPad E14 Intel Core i7 12th Gen 14"...	18	98,990
1	HP Laptop 15s, 12th Gen Intel Core i7-1255U, 1...	68	70,990
2	Lenovo IdeaPad Slim 5 Intel Core i7 12th Gen 1...	6	79,990
3	Acer Predator Helios Neo 16 Gaming Laptop 13th...	10	1,29,990
4	HP Envy x360 12th Gen Intel Core i7-13.3 inch(...	326	1,03,990
5	HP Victus Gaming Latest 12th Gen Intel Core i7...	53	90,990
6	Samsung Galaxy Book2 360 Intel 12th Gen i7 Evo...	4	1,03,990
7	ASUS TUF Gaming F15 (2023) 90WHr Battery, Inte...	1	1,15,990
8	Acer Predator Helios Neo 16 Gaming Laptop 13th...	492	1,49,990
9	HP Pavilion 14 12th Gen Intel Core i7 16GB SDR...	80	84,999

In [53]:
```
## close the driver
driver.quit()
```

8. Write a python program to scrape data for Top 1000 Quotes of All Time. The above task will be done in following steps:

1. First get the webpagehttps://www.azquotes.com/
2. Click on Top Quotes
3. Thanscrapa)Quoteb)Authorc)TypeOfQuotes

In [54]:
```
## Establish the connection to the driver
driver = webdriver.Chrome(r'chromedriver.exe')
```

In [55]:
```
## Open https://www.azquotes.com'
driver.get('https://www.azquotes.com')
```

In [56]:
```
## Click on Top quotes
Top_quotes = driver.find_element(By.XPATH,'//*[@id="menu"]/div/div[3]/ul/li[5]/a')
Top_quotes.click()
```

In [57]:
```
## to handle NoSuchElementexception
from selenium.common.exceptions import NoSuchElementException

start=1
end=11

Quote=[]
Author=[]
TypeOfQuotes=[]

for page in range(start,end):
    tags = driver.find_elements(By.XPATH,'//a[@class="title"]')
    for i in tags:
        tag = i.text
        Quote.append(tag)


    tags = driver.find_elements(By.XPATH,'//div[@class="author"]')
    for i in tags:
        tag = i.text
        Author.append(tag)


    tags = driver.find_elements(By.XPATH,'//div[@class="tags"]')
    for i in tags:
        tag = i.text
        TypeOfQuotes.append(tag)
    try:
        if(page!=11):
            next_button = driver.find_element(By.LINK_TEXT,'Next →')
            next_button.click()
            time.sleep(1)
    except NoSuchElementException as exc:
            print(exc)
```

```
Message: no such element: Unable to locate element: {"method":"link text","selector":"Next →"}
  (Session info: chrome=114.0.5735.90)
Stacktrace:
0   chromedriver                        0x00000001100706b8 chromedriver + 4937400
1   chromedriver                        0x0000000110067b73 chromedriver + 4901747
2   chromedriver                        0x000000010fc25616 chromedriver + 435734
3   chromedriver                        0x000000010fc68e0f chromedriver + 712207
4   chromedriver                        0x000000010fc690a1 chromedriver + 712865
5   chromedriver                        0x000000010fcaa9a4 chromedriver + 981412
6   chromedriver                        0x000000010fc8d03d chromedriver + 860221
7   chromedriver                        0x000000010fca7e76 chromedriver + 970358
8   chromedriver                        0x000000010fc8cde3 chromedriver + 859619
9   chromedriver                        0x000000010fc5ad7f chromedriver + 654719
10  chromedriver                        0x000000010fc5c0de chromedriver + 659678
11  chromedriver                        0x000000011002c2ad chromedriver + 4657837
12  chromedriver                        0x0000000110031130 chromedriver + 4677936
13  chromedriver                        0x0000000110037def chromedriver + 4705775
14  chromedriver                        0x000000011003205a chromedriver + 4681818
15  chromedriver                        0x000000011000492c chromedriver + 4495660
16  chromedriver                        0x000000011004f838 chromedriver + 4802616
17  chromedriver                        0x000000011004f9b7 chromedriver + 4802999
18  chromedriver                        0x000000011006099f chromedriver + 4872607
19  libsystem_pthread.dylib             0x00007ff8004444e1 _pthread_start + 125
20  libsystem_pthread.dylib             0x00007ff80043ff6b thread_start + 15
```

In [58]:
```
##Display all the data in dataframe

top_1000_quotes = pd.DataFrame(list(zip(Quote,Author,TypeOfQuotes)),columns=['Quote','Author','TypeOfQuote'])
top_1000_quotes
```

Out[58]:

	Quote	Author	TypeOfQuote
0	The essence of strategy is choosing what not t...	Michael Porter	Essence, Deep Thought, Transcendentalism
1	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
3	Death is something inevitable. When a man has ...	Nelson Mandela	Inspirational, Motivational, Death
4	You have to love a nation that celebrates its ...	Erma Bombeck	4th Of July, Food, Patriotic
...	...	...	...
995	Regret for the things we did can be tempered b...	Sydney J. Harris	Love, Inspirational, Motivational
996	America... just a nation of two hundred millio...	Hunter S. Thompson	Gun, Two, Qualms About
997	For every disciplined effort there is a multip...	Jim Rohn	Inspirational, Greatness, Best Effort
998	The spiritual journey is individual, highly pe...	Ram Dass	Spiritual, Truth, Yoga
999	The mind is not a vessel to be filled but a fi...	Plutarch	Inspirational, Leadership, Education

1000 rows × 3 columns

In [59]:
```
driver.quit()
```

9.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/.

This task will be done in following steps:

1. First get the webpagehttps://www.jagranjosh.com/
2. Then You have to click on the GK option
3. Then click on the List of all Prime Ministers of India
4. Then scrap the mentioned data and make theDataFrame.

In [60]:
```
## Set up the browser
driver = webdriver.Chrome(r'chromedriver.exe')
```

In [61]:
```
# OPen the given website
driver.get('https://www.jagranjosh.com/')
```

In [62]:
```
# Then You have to click on the GK option

driver.find_element(By.LINK_TEXT,'GK').click()
```

In [63]:
```
#Then click on the List of all Prime Ministers of India
driver.find_element(By.LINK_TEXT,'List of all Prime Ministers of India').click()
```

In [64]:
```
# Then scrap the mentioned data and make theDataFrame.

# Find the table containing the Prime Ministers' list
table = driver.find_element(By.TAG_NAME,"tbody")
# Find all rows in the table
rows = table.find_elements(By.TAG_NAME,"tr")

# Name, Born-Dead, Term of office, Remarks
data = []

# Extract the data from each row and append it to the DataFrame
for row in rows[1:]:
    columns = row.find_elements(By.TAG_NAME,"td")
    prime_minister = columns[1].text
    born_dead = columns[2].text
    Term_of_Office = columns[3].text.replace('\n','|')
    Remark =columns[4].text
    data.append([prime_minister, born_dead, Term_of_Office, Remark])

df = pd.DataFrame(data, columns=["Prime Minister", "Born-Dead", "Term Of Office","Remark"])
```

In [65]:
```
df
```

Out[65]:

	Prime Minister	Born-Dead	Term Of Office	Remark
0	Jawahar Lal Nehru	(1889–1964)	15 August 1947 to 27 May 1964|16 years, 286 days	The first prime minister of India and the long...
1	Gulzarilal Nanda (Acting)	(1898-1998)	27 May 1964 to 9 June 1964,|13 days	First acting PM of India
2	Lal Bahadur Shastri	(1904–1966)	9 June 1964 to 11 January 1966|1 year, 216 days	He has given the slogan of 'Jai Jawan Jai Kisa...
3	Gulzari Lal Nanda (Acting)	(1898-1998)	11 January 1966 to 24 January 1966|13 days	-
4	Indira Gandhi	(1917–1984)	24 January 1966 to 24 March 1977|11 years, 59 ...	First female Prime Minister of India
5	Morarji Desai	(1896–1995)	24 March 1977 to 28 July 1979 |2 year, 126 days	Oldest to become PM (81 years old) and first t...
6	Charan Singh	(1902–1987)	28 July 1979 to 14 January 1980|170 days	Only PM who did not face the Parliament
7	Indira Gandhi	(1917–1984)	14 January 1980 to 31 October 1984|4 years, 29...	The first lady who served as PM for the second...
8	Rajiv Gandhi	(1944–1991)	31 October 1984 to 2 December 1989|5 years, 32...	Youngest to become PM (40 years old)
9	V. P. Singh	(1931–2008)	2 December 1989 to 10 November 1990|343 days	First PM to step down after a vote of no confi...
10	Chandra Shekhar	(1927–2007)	10 November 1990 to 21 June 1991|223 days	He belongs to Samajwadi Janata Party
11	P. V. Narasimha Rao	(1921–2004)	21 June 1991 to 16 May 1996|4 years, 330 days	First PM from South India
12	Atal Bihari Vajpayee	(1924- 2018)	16 May 1996 to 1 June 1996|16 days	PM for shortest tenure
13	H. D. Deve Gowda	(born 1933)	1 June 1996 to 21 April 1997|324 days	He belongs to Janata Dal
14	Inder Kumar Gujral	(1919–2012)	21 April 1997 to 19 March 1998 |332 days	------
15	Atal Bihari Vajpayee	(1924-2018)	19 March 1998 to 22 May 2004 |6 years, 64 days	The first non-congress PM who completed a ful...
16	Manmohan Singh	(born 1932)	22 May 2004 to 26 May 2014 |10 years, 4 days	First Sikh PM
17	Narendra Modi	(born 1950)	26 May 2014 - 2019	4th Prime Minister of India who served two con...
18	Narendra Modi	(born 1950)	30 May 2019- Incumbent	First non-congress PM with two consecutive ten...

In [66]:
```
driver.quit()
```

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/

This task will be done in following steps:

1. First get the webpagehttps://www.motor1.com/
2. Then You have to type in the search bar '50 most expensive cars'
3. Then click on 50 most expensive cars in the world..
4. Then scrap the mentioned data and make the dataframe

In [67]:
```
## Establish a connection to the Chrome Browser
driver = webdriver.Chrome(r'chromedriver.exe')
```

In [68]:
```
#First get the webpage https://www.motor1.com/
driver.get('https://www.motor1.com/')
```

In [69]:
```
# Then You have to type in the search bar '50 most expensive cars'
search_box = driver.find_element(By.ID,"search_input")
search_box.send_keys("50 most expensive cars")
search_box.submit()
```

In [70]:
```
#3. Then click on 50 most expensive cars in the world..

driver.find_element(By.LINK_TEXT,'50 Most Expensive Cars In The World').click()
```

In [71]:
```
# 4. Then scrap the mentioned data and make the dataframe
data =[]

while len(data)<50:
    driver.find_element(By.XPATH,'//div[@class="postContent content-wrapper"]')

    car =driver.find_elements(By.XPATH,'//h3[@class="subheader"]')
    p =driver.find_elements(By.TAG_NAME,'strong')



    for i in range(len(car)):
        car_name = car[i].text
        car_price =p[i].text



        data.append([car_name,car_price])

        if len(data)==50:
            break
```

In [72]:
```
car_df = pd.DataFrame(data,columns=['Car_name','Car_Price'])

car_df
```

Out[72]:

	Car_name	Car_Price
0	De Tomaso P72	Price: $1.3 Million
1	Ferrari LaFerrari	Price: $1.4 Million
2	Pagani Huayra	Price: $1.4 Million
3	McLaren Elva	
4	Czinger 21C	Price: $1.7 Million
5	Ferrari Monza	Price: $1.7 Million
6	Gordon Murray T.33	Price: $1.7 Million
7	Koenigsegg Gemera	Price: $1.7 Million
8	Zenvo TSR-S	Price: $1.7 Million
9	Hennessey Venom F5	Price: $1.7 Million
10	Bentley Bacalar	Price: $1.8 Million
11	Hispano Suiza Carmen Boulogne	Price: $1.9 Million
12	Bentley Mulliner Batur	Price: $1.9 Million
13	Deus Vayanne	Price: $2.0 Million
14	SSC Tuatara	Price: $2.0 Million
15	Lotus Evija	Price: $2.0 Million*
16	Aston Martin Vulcan	Price: $2.1 Million
17	Delage D12	Price: $2.3 Million
18	McLaren Speedtail	Price: $2.3 Million
19	Rimac Nevera	Price: $2.3 Million
20	Pagani Utopia	Price: $2.4 Million
21	Pininfarina Battista	Price: $2.5 Million
22	Ferrari FXX K Evo	Price: $2.5 Million
23	Gordon Murray T.50	Price: $2.6 Million
24	Lamborghini Countach	Price: $2.6 Million
25	Mercedes-AMG Project One	Price: $2.6 Million
26	Aston Martin Victor	Price: $2.7 Million
27	Hennessey Venom F5 Roadster	Price: $3.0 Million
28	Koenigsegg Jesko	$3.0 Million
29	Aston Martin Valkyrie	Price: $3.0 Million
30	W Motors Lykan Hypersport	Price: $3.2 Million
31	McLaren Solus	Price: $3.4 Million
32	Pagani Huayra Roadster BC	$3.5 Million
33	Bugatti Chiron Pur Sport	Price: $3.5 Million
34	Lamborghini Sian	Price: $3.6 Million
35	Koenigsegg CC850	Price: $3.6 million
36	Bugatti Chiron Super Sport 300+	Price: $3.7 Million
37	Lamborghini Veneno	Price: $3.9 Million
38	Bugatti Bolide	Price: $4.5 Million
39	Bugatti Mistral	Price: $4.7 Million
40	Pagani Huayra Imola	Price: $5.0 Million
41	Bugatti Divo	Price: $5.4 Million
42	SP Automotive Chaos	Price: $5.8 Million
43	Pagani Codalunga	Price: $6.4 Million
44	Mercedes-Maybach Exelero	Price: $7.4 Million
45	Bugatti Centodieci	Price: $8.0 Million
46	Bugatti Chiron Profilée	Price: $9.0 Million
47	Rolls-Royce Sweptail	Price: $10.8 Million
48	Bugatti La Voiture Noire	Price: $12.8 Million
49	Rolls-Royce Boat Tail*	Price: $13.4 Million

In [73]:
```
driver.quit()
```

In [ ]:
```

```