```
In [1]:  ! pip install selenium
```

Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: selenium in c:\users\ponna\appdata\roaming\python\p
ython39\site-packages (4.9.1)
Requirement already satisfied: urllib3[socks]<3,>=1.26 in c:\programdata\anaconda3
\lib\site-packages (from selenium) (1.26.9)
Requirement already satisfied: trio~=0.17 in c:\users\ponna\appdata\roaming\python
\python39\site-packages (from selenium) (0.22.0)
Requirement already satisfied: trio-websocket~=0.9 in c:\users\ponna\appdata\roami
ng\python\python39\site-packages (from selenium) (0.10.2)
Requirement already satisfied: certifi>=2021.10.8 in c:\programdata\anaconda3\lib
\site-packages (from selenium) (2021.10.8)
Requirement already satisfied: async-generator>=1.9 in c:\users\ponna\appdata\roam
ing\python\python39\site-packages (from trio~=0.17->selenium) (1.10)
Requirement already satisfied: sortedcontainers in c:\programdata\anaconda3\lib\si
te-packages (from trio~=0.17->selenium) (2.4.0)
Requirement already satisfied: attrs>=19.2.0 in c:\programdata\anaconda3\lib\site-
packages (from trio~=0.17->selenium) (21.4.0)
Requirement already satisfied: sniffio in c:\programdata\anaconda3\lib\site-packag
es (from trio~=0.17->selenium) (1.2.0)
Requirement already satisfied: idna in c:\programdata\anaconda3\lib\site-packages
(from trio~=0.17->selenium) (3.3)
Requirement already satisfied: cffi>=1.14 in c:\programdata\anaconda3\lib\site-pac
kages (from trio~=0.17->selenium) (1.15.0)
Requirement already satisfied: exceptiongroup>=1.0.0rc9 in c:\users\ponna\appdata
\roaming\python\python39\site-packages (from trio~=0.17->selenium) (1.1.1)
Requirement already satisfied: outcome in c:\users\ponna\appdata\roaming\python\py
thon39\site-packages (from trio~=0.17->selenium) (1.2.0)
Requirement already satisfied: pycparser in c:\programdata\anaconda3\lib\site-pack
ages (from cffi>=1.14->trio~=0.17->selenium) (2.21)
Requirement already satisfied: wsproto>=0.14 in c:\users\ponna\appdata\roaming\pyt
hon\python39\site-packages (from trio-websocket~=0.9->selenium) (1.2.0)
Requirement already satisfied: PySocks!=1.5.7,<2.0,>=1.5.6 in c:\programdata\anaco
nda3\lib\site-packages (from urllib3[socks]<3,>=1.26->selenium) (1.7.1)
Requirement already satisfied: h11<1,>=0.9.0 in c:\users\ponna\appdata\roaming\pyt
hon\python39\site-packages (from wsproto>=0.14->trio-websocket~=0.9->selenium) (0.
14.0)

```
In [30]:  import selenium
          import pandas as pd
          from selenium import webdriver
          import warnings
          warnings.filterwarnings('ignore')
          import time
          from selenium.webdriver.common.keys import Keys
```

```
In [451…  driver=webdriver.Chrome()
```

```
In [ ]:
```

```
In [452…   driver.get("https://www.naukri.com")
```

```
In [ ]:
```

```
In [453…  search_job = driver.find_element(By.CLASS_NAME, "suggestor-input")
          search_job
```

```
Out[453]:  <selenium.webdriver.remote.webelement.WebElement (session="db9ae0110294e1a9653cfd9
           c8d5e404a", element="427325F01769C34E35B14B6ACD56A1A1_element_2")>
```

```python
In [ ]:
```

```python
In [89]:  search_job.send_keys('Data Analyst')
```

```python
In [97]:  search_location=driver.find_element(By.XPATH,'/html/body/div[1]/div[7]/div/div/div
          search_location.send_keys("Bangalore")
```

```python
In [99]:  #search=driver.find_element_by_class_name,('/html/body/div/div[2]/div[3]/div/div/d
          search=driver.find_element(By.CLASS_NAME,"qsbSubmit")
          search.click
```

```
Out[99]:  <bound method WebElement.click of <selenium.webdriver.remote.webelement.WebElement
          (session="45acfd0d4d44bb2012938f42b59be22f", element="04A3765557A51043BCFD1C973169
          FC56_element_70")>>
```

```python
In [106…  job_title=[]
          job_location=[]
          company_name=[]
          experience_required=[]
```

```python
In [107…  job_title_tag=driver.find_elements(By.XPATH,'//a[@class="title ellipsis"]')
          for i in job_title_tag[0:10]:
              title=i.text
              job_title.append(title)
```

```python
In [108…  job_location_tag=driver.find_elements(By.XPATH,'//span[@class="ellipsis fleft locWo
          for i in job_location_tag[0:10]:
              location=i.text
              job_location.append(location)
```

```python
In [109…  company_name_tag=driver.find_elements(By.XPATH,'//a[@class="subTitle ellipsis fleft
          for i in company_name_tag[0:10]:
              company_name_txt=i.text
              company_name.append(company_name_txt)
```

```python
In [133…  experience_required_tag=driver.find_elements(By.XPATH,'//span[@class="ellipsis fle
          for i in experience_required_tag[0:10]:
              experience_required_list=i.text
              experience_required.append(experience_required_list)
```

```python
In [134…  experience_required = []

          for i in experience_required_tag[0:10]:
              experience_required.append(i.text[0:10])
          experience_required
```

```
Out[134]:  ['3-6 Yrs',
           '5-10 Yrs',
           '5-8 Yrs',
           '5-10 Yrs',
           '1-4 Yrs',
           '4-6 Yrs',
           '3-6 Yrs',
           '2-7 Yrs',
           '3-5 Yrs',
           '6-9 Yrs']
```

```python
In [125…  company_name = []

          for i in company_name_tag[0:10]:
```

```
        company_name.append(i.text)

    company_name
```

Out[125]:
```
['Wipro',
 'Tata Consultancy Services (TCS)',
 'Artech',
 'Vuca Consulting',
 'KPI Partners',
 'Vsmart World Communication',
 'Brunel',
 'Hitachi Energy',
 'Hitachi Ltd.',
 'HARMAN']
```

In [127…
```
job_title = []

for i in job_title_tag[0:10]:
    job_title.append(i.text)
job_title
```

Out[127]:
```
['Tech Data Analyst',
 'Data Analyst',
 'Data Analyst',
 'Insight Data Analyst',
 'Data Analyst',
 'Data Analyst',
 'Data Analyst',
 'Celonis & Salesforce Data Analyst',
 'Celonis & Salesforce Data Analyst',
 'Data Analyst']
```

In [135…
```
print(len(job_title),len(job_location),len(company_name),len(experience_required))
```

```
10 10 10 10
```

In [136…
```
jobs=pd.DataFrame({'Title':job_title,'Location':job_location,'Company_Name':compan
jobs
```

Out[136]:

	Title	Location	Company_Name	Experience_Required
0	Tech Data Analyst	Hybrid - Bangalore/ Bengaluru, Karnataka, Gurg...	Wipro	3-6 Yrs
1	Data Analyst	Bangalore/Bengaluru, Kolkata, Hyderabad/Secund...	Tata Consultancy Services (TCS)	5-10 Yrs
2	Data Analyst	Bangalore/ Bengaluru, Karnataka	Artech	5-8 Yrs
3	Insight Data Analyst	Bangalore/ Bengaluru, Karnataka, Noida, Uttar ...	Vuca Consulting	5-10 Yrs
4	Data Analyst	Bangalore/Bengaluru, Kolkata, Mumbai, New Delh...	KPI Partners	1-4 Yrs
5	Data Analyst	Bangalore/Bengaluru	Vsmart World Communication	4-6 Yrs
6	Data Analyst	Bangalore/Bengaluru, Chennai	Brunel	3-6 Yrs
7	Celonis & Salesforce Data Analyst	Bangalore/Bengaluru	Hitachi Energy	2-7 Yrs
8	Celonis & Salesforce Data Analyst	Hybrid - Bangalore/Bengaluru	Hitachi Ltd.	3-5 Yrs
9	Data Analyst	Hybrid - Bangalore/Bengaluru, Delhi / NCR	HARMAN	6-9 Yrs

In [ ]:
```python
#question 2
```

In [138...
```python
search_job = driver.find_element(By.CLASS_NAME, "suggestor-input")
search_job
```

Out[138]:
```
<selenium.webdriver.remote.webelement.WebElement (session="45acfd0d4d44bb2012938f4
2b59be22f", element="128987B56070B884D510518AA8DC383C_element_401")>
```

In [139...
```python
search_job.send_keys('Data Scientist')
```

In [149...
```python
search_location=driver.find_element(By.XPATH,'//*[@id="root"]/div[7]/div/div/div[5
search_location.send_keys("Bangalore")
```

In [151...
```python
search_button=driver.find_element(By.CLASS_NAME,"qsbSubmit")
search_button.click
```

Out[151]:
```
<bound method WebElement.click of <selenium.webdriver.remote.webelement.WebElement
(session="674648092c3ce44873ae56f4eb025bab", element="59B071655335BA7D1DAE41778A38
93B5_element_200")>>
```

In [152...
```python
job_title_b=[]
job_location_b=[]
company_name_b=[]
experience_required_b=[]
```

In [153...
```python
job_title_b_tag=driver.find_elements(By.XPATH,'//a[@class="title ellipsis"]')
for i in job_title_b_tag[0:10]:
    title_b=i.text
    job_title_b.append(title)
```

```
In [154...  job_title_b = []

            for i in job_title_b_tag[0:10]:
                job_title_b.append(i.text)
            job_title_b
```

```
Out[154]:  ['Permanent Opportunity - Data Scientist(Snaplogic&Snowflake), Pan India',
            'Analytics & Modeling Specialist',
            'Machine Learning (AI) Architect',
            'Staff Data Scientist',
            'Data Scientist',
            'Senior Data Scientist',
            'Data Scientist',
            'Hiring For Data Scientist',
            'Data Scientist',
            'Data Scientist']
```

```
In [176...  job_location_b_tag=driver.find_elements(By.XPATH,'//span[@class="ellipsis fleft lo
            for i in job_location_b_tag[0:10]:
                location_b=i.text
                job_location_b.append(location_b)
```

```
In [160...  company_name_b_tag=driver.find_elements(By.XPATH,'//a[@class="subTitle ellipsis fl
            for i in company_name_b_tag[0:10]:
                company_name_b_txt=i.text
                company_name_b.append(company_name_b_txt)
```

```
In [162...  experience_required_b_tag=driver.find_elements(By.XPATH,'//span[@class="ellipsis f
            for i in experience_required_b_tag[0:10]:
                experience_required_b_list=i.text
                experience_required_b.append(experience_required_list)
```

```
In [163...  job_title_b = []

            for i in job_title_b_tag[0:10]:
                job_title_b.append(i.text)
            job_title_b
```

```
Out[163]:  ['Permanent Opportunity - Data Scientist(Snaplogic&Snowflake), Pan India',
            'Analytics & Modeling Specialist',
            'Machine Learning (AI) Architect',
            'Staff Data Scientist',
            'Data Scientist',
            'Senior Data Scientist',
            'Data Scientist',
            'Hiring For Data Scientist',
            'Data Scientist',
            'Data Scientist']
```

```
In [164...  company_name_b = []

            for i in company_name_b_tag[0:10]:
                company_name_b.append(i.text)

            company_name_b
```

```
Out[164]:    ['Deloitte',
              'Accenture',
              'Persistent',
              'Walmart',
              'Tata Consultancy Services (TCS)',
              'Walmart',
              'Walmart',
              'Tata Consultancy Services (TCS)',
              'Infogain',
              'IBS Software Services']
```

```python
In [174...   experience_required_b = []

            for i in experience_required_b_tag[0:10]:
                experience_required_b.append(i.text[0:10])
            experience_required
```

```
Out[174]:    ['3-6 Yrs',
              '5-10 Yrs',
              '5-8 Yrs',
              '5-10 Yrs',
              '1-4 Yrs',
              '4-6 Yrs',
              '3-6 Yrs',
              '2-7 Yrs',
              '3-5 Yrs',
              '6-9 Yrs']
```

```python
In [177...   print(len(job_title_b),len(job_location_b),len(company_name_b),len(experience_requ:

            10 10 10 10
```

```python
In [178...   df=pd.DataFrame({'Title':job_title_b,'Location':job_location_b,'Company_Name':compa
            df
```

	Title	Location	Company_Name	Experience_Required
0	Permanent Opportunity - Data Scientist(Snaplog...	Hybrid - Bangalore/Bengaluru, Kolkata, Hyderab...	Deloitte	9-14 Yrs
1	Analystics & Modeling Specialist	Bangalore/Bengaluru, Kolkata, Mumbai, Hyderaba...	Accenture	6-8 Yrs
2	Machine Learning (AI) Architect	Bangalore/Bengaluru, Kolkata, Mumbai, New Delh...	Persistent	5-12 Yrs
3	Staff Data Scientist	Bangalore/Bengaluru	Walmart	6-8 Yrs
4	Data Scientist	Bangalore/ Bengaluru, Karnataka	Tata Consultancy Services (TCS)	4-8 Yrs
5	Senior Data Scientist	Bangalore/Bengaluru	Walmart	1-6 Yrs
6	Data Scientist	Bangalore/Bengaluru	Walmart	4-6 Yrs
7	Hiring For Data Scientist	Hybrid - Bangalore/ Bengaluru, Karnataka, Hyde...	Tata Consultancy Services (TCS)	4-9 Yrs
8	Data Scientist	Hybrid - Bangalore/Bengaluru, Pune, Delhi / NC...	Infogain	3-6 Yrs
9	Data Scientist	Bangalore/Bengaluru, Kolkata, Mumbai, New Delh...	IBS Software Services	3-8 Yrs

In [ ]:
```python
#question 3:
```

In [268...
```python
search_job = driver.find_element(By.CLASS_NAME, "suggestor-input")
search_job
```

Out[268]:
```
<selenium.webdriver.remote.webelement.WebElement (session="8759f6e93195d2ec7f15b94
290b74ba1", element="A207F5CEE1CC076007E2AA7ECF0B634C_element_2")>
```

In [454...
```python
search_job.send_keys('Data Scientist')
```

In [464...
```python
loc_filter=driver.find_elements(By.XPATH,"//div[@class='mt-8 chckBoxCont']//span")


for i in loc_filter :
    if (i.text=='Delhi / NCR'):
        i.click()
        break
```

In [467...
```python
sal_filter=driver.find_elements(By.XPATH,"//div[@class='mt-8 chckBoxCont']//span")
for i in sal_filter:
    if(i.text=='3-6 Lakhs'):
        i.click()
        break
```

In [468...
```python
job_title=[]
comp_name=[]
exp_req=[]
loc=[]
```

```
In [469...   job_title=driver.find_elements(By.XPATH,"//a[@class='title fw500 ellipsis']")
             job=[]
             for i in job_title:
                 job.append(i.text)
             job
```

Out[469]:   []

```
In [460...   comp_name=driver.find_elements(By.XPATH,"//a[@class='subTitle ellipsis fleft']")
             company=[]
             for i in comp_name:
                 company.append(i.text)

             company
```

Out[460]:   []

```
In [461...   exp_req=driver.find_elements(By.XPATH,"//li[@class='fleft grey-text br2 placeHolder
             experience=[]
             for i in exp_req:
                 experience.append(i.text)
             experience
```

Out[461]:   []

```
In [470...   loc=driver.find_elements(By.XPATH,"//li[@class='fleft grey-text br2 placeHolderLi
             location=[]
             for i in loc:
                 location.append(i.text)

             location
```

Out[470]:   []

```
In [472...   print(len(job_title),len(loc),len(exp_req),len(comp_name))

             0 0 0 0
```

```
In [463...   df3=pd.DataFrame()
             df3["JOB_TITLE"]=job[:10]
             df3["COMPANY_NAME"]=company[:10]
             df3["EXPERIENCE_REQUIRED"]=experience[:10]
             df3["JOB_LOCATION"]=location[:10]
             df3
```

Out[463]:   **JOB_TITLE   COMPANY_NAME   EXPERIENCE_REQUIRED   JOB_LOCATION**

```
In [ ]:     #question 4:Scrape data of first 100 sunglasses listings on flipkart.com. You have
```

```
In [325...    driver.get("https://www.flipkart.com")
```

```
In [278...   search_sunglasses=driver.find_element(By.CLASS_NAME,"_3704LK")
             search_sunglasses.send_keys("sunglasses")
```

```
In [283...   search_button=driver.find_element(By.XPATH,"/html/body/div[1]/div/div[1]/div[1]/div
             search_button.click
```

```
Out[283]:  <bound method WebElement.click of <selenium.webdriver.remote.webelement.WebElement
           (session="b2cac18ce7f5f1682d3c3c15bf02609e", element="A66B02EFE38DCC51060D7B870556
           8EBC_element_135")>>
```

```
In [319…   Brand = []
           Product_Description = []
           Price= []


           for i in range(3):
               brand = driver.find_elements(By.XPATH,"//div[@class='_2WkVRV']")
               for i in brand:Brand.append(i.text)

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

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

           time.sleep(5)


           nxt_button=driver.find_element(By.XPATH,"//a[@class='_1LKTO3']")#scraping the list
           nxt_button.click()
```

```
In [ ]:
```

```
In [320…   print(len(Brand),len(Product_Description),len(Price))
```

```
120 120 120
```

```
In [323…   df = pd.DataFrame({'Brand': Brand,'Product_Description':Product_Description,'Price

           df
```

Out[323]:

	Brand	Product_Description	Price
0	Elligator	Others Cat-eye, Retro Square, Wayfarer Sunglas...	₹149
1	Elligator	UV Protection Cat-eye, Retro Square, Oval, Rou...	₹129
2	ROZZETTA CRAFT	Polarized, Riding Glasses Sports, Wrap-around ...	₹449
3	Singco India	Riding Glasses, UV Protection Clubmaster, Wayf...	₹296
4	Fastrack	UV Protection Wayfarer Sunglasses (53)	₹599
...	...	...	...
115	OAKLEY	Shield Sunglass	₹5,899
116	ROYAL SON	Polarized, UV Protection Retro Square Sunglass...	₹551
117	Elligator	UV Protection Wayfarer Sunglasses (53)	₹221
118	Rich Club	UV Protection Retro Square Sunglasses (54)	₹258
119	ROZZETTA CRAFT	Polarized, UV Protection Aviator Sunglasses (55)	₹471

120 rows × 3 columns

```
In [ ]:   #QUESTION5
```

```
In [334…   driver.get("https://www.flipkart.com/apple-iphone-11-black-64-gb/product-reviews/
```

```
In [343…  Rating= []
          Review_Summary = []
          Full_review= []


          for i in range(10):
              rating = driver.find_elements(By.XPATH,"//div[@class='_3LWZlK _1BLPMq']")
              for i in rating:Rating.append(i.text)

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

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

          time.sleep(5)


          nxt_button=driver.find_element(By.XPATH,"//a[@class='_1LKTO3']")
          nxt_button.click()
```

```
In [ ]:
```

```
In [344…  print(len(Rating),len(Review_Summary),len(Full_review))

          100 100 100
```

```
In [346…  df = pd.DataFrame({'Rating': Rating,'Review_Summary':Review_Summary,'Full_review':

          df
```

Out[346]:

	Rating	Review_Summary	Full_review
0	5	Fabulous!	This is my first iOS phone. I am very happy wi…
1	5	Classy product	Best and amazing product…..phone looks so pr…
2	5	Worth every penny	i11 is worthy to buy, too much happy with the …
3	5	Perfect product!	It's a must buy who is looking for an upgrade …
4	4	Good choice	So far it's been an AMAZING experience coming …
...	…	…	…
95	5	Perfect product!	Value for money❤️❤️\nIts awesome mobile phone …
96	5	Highly recommended	iphone 11 is a very good phone to buy only if …
97	5	Highly recommended	Amazing camera quality as expected, battery al…
98	4	Value-for-money	Just got this iphone 11\nAnd it is most powerf…
99	5	Perfect product!	It is just awesome mobile for this price from …

100 rows × 3 columns

```
In [ ]:  #QUESTION:
```

```
In [347…  driver=webdriver.Chrome()
```

```
In [348…  driver.get('https://www.flipkart.com/')
```

```
search_item = driver.find_element(By.CLASS_NAME,"_3704LK")
search_item.send_keys("sneakers")
time.sleep(3)
```

```
click_search_button = driver.find_element(By.XPATH,"/html/body/div[1]/div/div[1]/d:
click_search_button.click()
time.sleep(3)
```

```
Brand = []
Product_Description = []
Price = []

for i in range(3):

    brand = driver.find_elements(By.XPATH,"//div[@class='_2WkVRV']")
    product_des = driver.find_elements(By.XPATH,"//div[@class='_2B099V']/a[1]")
    price = driver.find_elements(By.XPATH,"//div[@class='_30jeq3']")


    for i in brand:
        Brand.append(i.text)
    for i in product_des:
        Product_Description.append(i.text)
    for i in price :
        Price.append(i.text)

time.sleep(3)

nxt_button = driver.find_element(By.XPATH,"//a[@class='_1LKTO3']")
nxt_button.click()
```

```
print(len(Brand),len(Product_Description),len(Price))
```

```
120 120 120
```

```
df = pd.DataFrame({'Brand':Brand,'Product_Description':Product_Description,'Price'

df[0:100]
```

	Brand	Product_Description	Price
0	BRUTON	Combo Pack Of 2 Casual Shoes Sneakers For Men	₹399
1	kardam&sons	Fashionable Canvas Casual Partywear Outdoor Sn...	₹335
2	aadi	Synthetic Leather |Lightweight|Comfort|Summer|...	₹249
3	World Wear Footwear	Latest Exclusive Affordable Collection of Tren...	₹279
4	aadi	Sneakers For Men	₹349
...	...	...	...
95	Magnolia	Modern Trendy Sneakers boot Sneakers Sneakers ...	₹398
96	BRUTON	2 Combo Sneaker Shoes Sneakers For Men	₹399
97	BRUTON	Combo Pack Of 2 Casual Shoes Sneakers For Men ...	₹399
98	aadi	Lightweight,Comfort,Summer,Trendy,Walking,Outd...	₹249
99	Kraasa	Sneakers For Women	₹299

100 rows × 3 columns

In [ ]:
```python
#QQUESTION
```

In [369...
```python
driver=webdriver.Chrome()
```

In [370...
```python
url="https://www.amazon.in/"
driver.get(url)
```

In [371...
```python
search_col=driver.find_element(By.XPATH,"//input[@class='nav-input nav-progressive
search_col.send_keys('laptop')
```

In [390...
```python
search_button=driver.find_elements(By.XPATH,"//input[@class='nav-input nav-progress
```

In [391...
```python
search_button[1].click()
```

In [362...
```python
title_el=driver.find_elements(By.XPATH,"//h2[@class='a-size-mini a-spacing-none a-
title=[]
for i in title_el[:10]:
    title.append(i.text)
title
```

```
Out[362]:   ['Lenovo IdeaPad Slim 3 Intel Core i3 12th Gen 15.6" (39.62cm) FHD Thin & Light La
            ptop (8GB/512GB SSD/Windows 11/Office 2021/2Yr Warranty/3months Game Pass/Arctic G
            rey/1.63Kg), 82RK006DIN',
             'Lenovo IdeaPad 3 11th Gen Intel Core i3 15.6" FHD Thin & Light Laptop(8GB/512GB
            SSD/Windows 11/Office 2021/2Yr Warranty/3months Xbox Game Pass/Platinum Grey/1.7K
            g), 81X800N2IN',
             'HP 247 G8 Laptop (AMD Athlon P-3045B HD/ 14 inches(35.5cm) HD /8GB RAM DDR4 /1TB
            HDD/Windows 11 Home/ W11 SL) One Year Warranty, Black, 67U77PA',
             'MSI Titan GT77 HX, Intel 13th Gen. i9-13980HX, 44CM FHD 144Hz Mini LED, HDR 1000
            Gaming Laptop (64GB/4TB NVMe SSD/Windows 11 Home/Nvidia GeForce RTX4090, 16GB GDDR
            6/Core Black/3.3Kg), 13VI-092IN',
             'Lenovo IdeaPad Slim 3 Intel Core i5 12th Gen 15.6" (39.62cm) FHD Thin & Light La
            ptop (8GB/512GB SSD/Windows 11/Office 2021/Backlit/2Yr Warranty/3months Game Pass/
            Arctic Grey/1.63Kg), 82RK0062IN',
             'ASUS VivoBook 15 (2021), 15.6-inch (39.62 cm) HD, Dual Core Intel Celeron N4020,
            Thin and Light Laptop (4GB RAM/256GB SSD/Integrated Graphics/Windows 11 Home/Trans
            parent Silver/1.8 Kg), X515MA-BR011W',
             'HP 15s, Intel Core i3-1115G4, 15.6 inch(39.6cm) FHD Anti-Glare Laptop(8GB RAM/51
            2GB SSD/Intel UHD Graphics/Win 11/MSO/Dual Speakers/Alexa) 15s-fq2717TU',
             'HP 15s,11th Gen Intel Core i3-1115G4 8GB RAM/512GB SSD 15.6-inch(39.6 cm) Micro-
            Edge Anti-Glare FHD Laptop/Alexa Built-in/Win 11/Intel UHD Graphics/Dual Speakers/
            MS Office 2021/1.69 Kg, 15s-fq2673TU',
             'Lenovo IdeaPad Slim 3 Intel Core i3-1115G4 11th Gen 15.6" (39.62cm) FHD Laptop
            (8GB/256GB SSD/Win 11/Office 2021/2 Year Warranty/3 Month Game Pass/Arctic Grey/1.
            65Kg), 82H803GTIN',
             'AXL Laptop (Vayu Book) Newly Launched Thin & Light | 14.1 Inch HD Display (4GB/1
            28GB SSD | 1920 * 1080 FHD IPS | HD Gemini Lake N4020 | Windows 11 Home | UHD Grap
            hics 600 | Space Grey']
```

In [374…
```python
price_el=driver.find_elements(By.XPATH,"//span[@class='a-price-whole']")
price=[]
for i in price_el[:10]:
    price.append(i.text)
price
```

Out[374]:
```
['41,990',
 '37,550',
 '23,390',
 '23,399',
 '6,56,711',
 '37,550',
 '55,400',
 '25,990',
 '14,999',
 '39,990']
```

In [393…
```python
url2=driver.find_elements(By.XPATH,"//a[@class='a-link-normal a-text-normal']")

rating_url=[]
for i in url2[0:10]:
    rating_url.append(i.get_attribute('href'))
rating_url
```

Out[393]:   []

In [386…
```python
import time
rating=[]
for i in rating_url[:10]:
    driver.get(i)
    time.sleep(3)
    try:

        ratings = driver.find_element(By.XPATH,".//span[@class='a-icon-alt']/..")
        ratings = ratings.get_attribute('innerHTML').split(">")[1].split(" ")[0]
```

```
            rating.append(ratings)
        except:


            rating.append("00")
    rating
```

Out[386]:
```
[]
```

In [394...
```
len(price)
```

Out[394]:
```
10
```

In [395...
```
len(title)
```

Out[395]:
```
10
```

In [ ]:
```
#QUESTION
```

In [419...
```
import json
import logging as LOG
```

In [420...
```
import requests
from bs4 import BeautifulSoup
```

In [421...
```
LOG.basicConfig(level=LOG.INFO)
```

In [422...
```
QUOTES_BASE_URL = 'https://www.azquotes.com/top_quotes.html?p='
OUTPUT_FILE = 'quotes-better.json'
MAX_PAGE_NUMBER_EXCLUSIVE = 11
```

In [437...
```
def main():
    LOG.info('Started')
    quotes=[]
```

In [444...
```
 for page in range(1, MAX_PAGE_NUMBER_EXCLUSIVE):
        quotes = get_quotes_from_page(f"{QUOTES_BASE_URL}{page}")
        LOG.info(f"quotes scraped: {len(quotes)}")
```

INFO:root:Retrieving quotes from https://www.azquotes.com/top_quotes.html?p=1
INFO:root:100 quotes retrieved
INFO:root:quotes scraped: 100
INFO:root:Retrieving quotes from https://www.azquotes.com/top_quotes.html?p=2
INFO:root:100 quotes retrieved
INFO:root:quotes scraped: 100
INFO:root:Retrieving quotes from https://www.azquotes.com/top_quotes.html?p=3
INFO:root:100 quotes retrieved
INFO:root:quotes scraped: 100
INFO:root:Retrieving quotes from https://www.azquotes.com/top_quotes.html?p=4
INFO:root:100 quotes retrieved
INFO:root:quotes scraped: 100
INFO:root:Retrieving quotes from https://www.azquotes.com/top_quotes.html?p=5
INFO:root:100 quotes retrieved
INFO:root:quotes scraped: 100
INFO:root:Retrieving quotes from https://www.azquotes.com/top_quotes.html?p=6
INFO:root:100 quotes retrieved
INFO:root:quotes scraped: 100
INFO:root:Retrieving quotes from https://www.azquotes.com/top_quotes.html?p=7
INFO:root:100 quotes retrieved
INFO:root:quotes scraped: 100
INFO:root:Retrieving quotes from https://www.azquotes.com/top_quotes.html?p=8
INFO:root:100 quotes retrieved
INFO:root:quotes scraped: 100
INFO:root:Retrieving quotes from https://www.azquotes.com/top_quotes.html?p=9
INFO:root:100 quotes retrieved
INFO:root:quotes scraped: 100
INFO:root:Retrieving quotes from https://www.azquotes.com/top_quotes.html?p=10
INFO:root:100 quotes retrieved
INFO:root:quotes scraped: 100

In [445...
```python
with open(OUTPUT_FILE, "w") as f:
        LOG.info(f"Writing {len(quotes)} quotes to file...")
        json.dump(quotes, f)
```

INFO:root:Writing 100 quotes to file...

In [446...
```python
LOG.info("Job's finished")
```

INFO:root:Job's finished

In [447...
```python
def get_quotes_from_page(url):
    LOG.info(f"Retrieving quotes from {url}")
    quotes = []
```

In [450...
```python
 request = requests.get(url)
    Soup = BeautifulSoup(request.content, "html.parser")
```

```
  Input In [450]
    Soup = BeautifulSoup(request.content, "html.parser")
    ^
IndentationError: unexpected indent
```

In [ ]:
```python
quotes_container = soup.find("ul", class_="list-quotes")
    for li in quotes_container.find_all("li"):
        quote_info = li.find('a', {'class' : 'title'})
        quotes.append({
                f"quote-{quote_info['href'].split('/quote/')[1]}" : {
                    "content": quote_info.text,
                    "author": soup.select('.author > a')[0].text
                }
        })
```

```python
LOG.info(f"{len(quotes)} quotes retrieved")
    return quotes
```

```python
if __name__ == '__main__':
    main()
```

INFO:root:Started

```python
LOG.info(f"{len(quotes)} quotes retrieved")
    return quotes
```

```python
if __name__ == '__main__':
    main()
```

INFO:root:Started

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