

Question NO 1 Answer

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

```
Requirement already satisfied: selenium in c:\users\chand\anaconda3\lib\site-packages (4.8.0)
Requirement already satisfied: certifi>=2021.10.8 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (2021.10.8)
Requirement already satisfied: trio~=0.17 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (0.22.0)
Requirement already satisfied: urllib3[socks]~=1.26 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (1.26.9)
Requirement already satisfied: trio-websocket~=0.9 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (0.9.2)
Requirement already satisfied: idna in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (3.3)
Requirement already satisfied: async-generator>=1.9 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.10)
Requirement already satisfied: attrs>=19.2.0 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (21.4.0)
Requirement already satisfied: cffi>=1.14 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.15.0)
Requirement already satisfied: exceptiongroup>=1.0.0rc9 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.1.0)
Requirement already satisfied: sortedcontainers in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (2.4.0)
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Requirement already satisfied: pycparser in c:\users\chand\anaconda3\lib\site-packages (from cffi>=1.14->trio~=0.17->selenium) (2.21)
Requirement already satisfied: wsproto>=0.14 in c:\users\chand\anaconda3\lib\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:\users\chand\anaconda3\lib\site-packages (from urllib3[socks]~=1.26->selenium) (1.7.1)
Requirement already satisfied: h11<1,>=0.9.0 in c:\users\chand\anaconda3\lib\site-packages (from wsproto>=0.14->trio-websocket~=0.9->selenium) (0.14.0)
```

```
In [2]: import selenium
import pandas as pd
from selenium import webdriver
from selenium.common.exceptions import StaleElementReferenceException, NoSuchElementException
from selenium.webdriver.common.by import By
import time
```

```
In [3]: driver = webdriver.Chrome(r"Chromedriver.exe")
```

```
C:\Users\chand\AppData\Local\Temp\ipykernel_34692\4180548419.py:1: DeprecationWarning: executable_path has been deprecated, please pass in a Service object
  driver = webdriver.Chrome(r"Chromedriver.exe")
```

```
In [4]: driver.get("https://www.amazon.in/")
```

```
In [6]: product = input("Enter any product name = ")
```

```
search = driver.find_element(By.XPATH, '/html/body/div[1]/header/div/div[1]/div[2]/div/form/div[2]/div[1]/input')
search.send_keys(product)
search_key = driver.find_element(By.XPATH, '/html/body/div[1]/header/div/div[1]/div[2]/div/form/div[3]/div/span')
search_key.click()
```

```
Enter any product name = guitar
```

Question NO 2 Answer

```
In [11]: product_urls = []
start=0
end=3
for page in range(start,end):

    try:
        url=driver.find_elements(By.XPATH, '//a[@class="a-link-normal s-no-outline"]')
        for i in url[:10]:
            product_urls.append(i.get_attribute("href"))
        next_button = driver.find_element(By.XPATH, '//a[@class="s-pagination-item s-pagination-next s-pagination-item s-pagination-next"]')
        next_button.click()
        time.sleep(2)

    except NoSuchElementException:
        product_urls.append('.')

In [12]: len(product_urls)
```

Out[12]: 21

```
In [13]: Name=[]

for url in product_urls[:10]:
    driver.get(url)
    time.sleep(2)

    try:
        name=driver.find_elements(By.XPATH, '///span[@class="a-size-base-plus a-color-base a-text-normal"]')
        for i in name[0:10]:
            Name.append(i.text)

    except NoSuchElementException:
        Name.append('-')
```

In [14]: Name

Out[14]: []

```
In [17]: Name = []
Price=[]
Delivery=[]
Avail=[]

for url in product_urls[:10]:
    driver.get(url)
    time.sleep(2)

    try:
        names=driver.find_elements(By.XPATH, '///span[@class="a-size-large product-title-word-break"]')
        for i in names[0:10]:
            Name.append(i.text)

        price=driver.find_elements(By.XPATH, '///span[@class="a-price aok-align-center reinventPricePriceToPayMar')
        for i in price[0:10]:
            Price.append(i.text)

        delivery=driver.find_elements(By.XPATH, '/html/body/div[2]/div[2]/div[5]/div[4]/div[1]/div[3]/div/div[1]')
        for i in delivery[0:10]:
            Delivery.append(i.text)

        avail=driver.find_elements(By.XPATH, '///div[@class="a-section a-spacing-none a-spacing-top-micro }"]')
        for i in avail[0:10]:
            Avail.append(i.text)

    except NoSuchElementException:
        Name.append('-')
        Price.append('-')
        Delivery.append('-')
        Avail.append('-')
```

In [20]: print(len(Name),len(Price),len(Delivery),len(Avail))

10 10 9 10

In [29]: import pandas as pd

In [30]: ff=pd.DataFrame({'NAME':Name, 'PRICE':Price, 'AVAILABILITY':Avail})

In [31]: ff

Out[31]:

	NAME	PRICE	AVAILABILITY
0	Festra R-40-Natural Acoustic Guitar Kit with B...	₹4,495	In stock
1	Blueberry VIP 341, 34 Inch Acoustic Guitar Kit...	₹3,290	In stock
2	Blueberry B40L, 40" Acoustic Guitar Kit Inbuil...	₹4,645	In stock
3	Blueberry VIP 301, 30 Inch Acoustic Guitar Kit...	₹3,290	In stock
4	Yamaha TRBX174 TRBX Series Electric Bass Guita...	₹18,190	Only 1 left in stock
5	Yamaha PACIFICA012 Electric Guitar - Black	₹15,990	Only 1 left in stock
6	Kadence Guitar Acoustica Series A05, Electric ...	₹7,399	In stock
7	Fender Acoustic Guitar with Cutaway Electronic...	₹25,299	In stock
8	Fender Acoustic Guitar Dreadnought Cutaway Ele...	₹18,115	In stock
9	Vault EA40 41 inch Premium Solid Spruce-Top Cu...	₹7,499	In stock

In []:

Question NO 3 Answer

```
In [1]: !pip install selenium
import pandas as pd
import selenium
from selenium import webdriver
from selenium.common.exceptions import StaleElementReferenceException, NoSuchElementException
from selenium.webdriver.common.by import By
```

```
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Requirement already satisfied: outcome in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.2.0)
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Requirement already satisfied: sortedcontainers in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (2.4.0)
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Requirement already satisfied: PySocks!=1.5.7,<2.0,>=1.5.6 in c:\users\chand\anaconda3\lib\site-packages (from urllib3[socks]~=1.26->selenium) (1.7.1)
Requirement already satisfied: h11<1,>=0.9.0 in c:\users\chand\anaconda3\lib\site-packages (from wsproto>=0.14->trio-websocket~=0.9->selenium) (0.14.0)
```

```
In [2]: driver = webdriver.Chrome(r'chromedriver.exe')
```

```
C:\Users\chand\AppData\Local\Temp\ipykernel_10096\3588740966.py:1: DeprecationWarning: executable_path has been deprecated, please pass in a Service object
  driver = webdriver.Chrome(r'chromedriver.exe')
```

```
In [3]: driver.get('https://images.google.com/?gws_rd=ssl')
```

```
In [4]: search_key = driver.find_element(By.XPATH, '/html/body/div[1]/div[3]/form/div[1]/div[1]/div[1]/div/div[2]/input')
search_button = driver.find_element(By.XPATH, '/html/body/div[1]/div[3]/form/div[1]/div[1]/div[1]/button/div/spa
```

```
In [5]: k = input("Enter any name = ")
search_key.send_keys(k)
search_button.click()
```

Enter any name = cakes

```
In [6]: for _ in range(20):
        driver.execute_script("window.scrollTo(0,1000)")
```

```
In [24]: !pip install bs4
!pip install requests
import requests
from bs4 import BeautifulSoup
```

```
Requirement already satisfied: bs4 in c:\users\chand\anaconda3\lib\site-packages (0.0.1)
Requirement already satisfied: beautifulsoup4 in c:\users\chand\anaconda3\lib\site-packages (from bs4) (4.11.1)
Requirement already satisfied: soupsieve>1.2 in c:\users\chand\anaconda3\lib\site-packages (from beautifulsoup4->bs4) (2.3.1)
Requirement already satisfied: requests in c:\users\chand\anaconda3\lib\site-packages (2.27.1)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\chand\anaconda3\lib\site-packages (from requests) (2021.10.8)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\chand\anaconda3\lib\site-packages (from requests) (1.26.9)
Requirement already satisfied: charset-normalizer~=2.0.0 in c:\users\chand\anaconda3\lib\site-packages (from requests) (2.0.4)
Requirement already satisfied: idna<4,>=2.5 in c:\users\chand\anaconda3\lib\site-packages (from requests) (3.3)
```

```
In [22]: images= driver.find_elements(By.XPATH, '//img[@class="rg_i Q4LuWd"]')
img_urls=[]
img_data=[]

for image in images:
    source=image.get_attribute('src')
```

```

if source is not None:
    if source[0:4]=='http':
        img_urls.append(source)

for i in range(len(img_urls)):
    if i>10:
        break
    print(" downloading {0} of {1} images ".format(i,10))
    response=requests.get(img_urls[i])
    file = open(r'C:\Users\chand\newfile'+str(i)+'.jpg','wb')
    file.write(response.content)

```

```

downloading 0 of 10 images
downloading 1 of 10 images
downloading 2 of 10 images
downloading 3 of 10 images
downloading 4 of 10 images
downloading 5 of 10 images
downloading 6 of 10 images
downloading 7 of 10 images
downloading 8 of 10 images
downloading 9 of 10 images
downloading 10 of 10 images

```

In [23]: file

Out[23]: <_io.BufferedWriter name='C:\\Users\\chand\\newfile10.jpg'>

In []:

Question NO 4

```

In [1]: !pip install selenium
import selenium
import pandas as pd
from selenium import webdriver
from selenium.common.exceptions import StaleElementReferenceException, NoSuchElementException
from selenium.webdriver.common.by import By
import time

```

```

Requirement already satisfied: selenium in c:\users\chand\anaconda3\lib\site-packages (4.8.0)
Requirement already satisfied: trio-websocket~=0.9 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (0.9.2)
Requirement already satisfied: certifi>=2021.10.8 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (2021.10.8)
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Requirement already satisfied: exceptiongroup>=1.0.0rc9 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.1.0)
Requirement already satisfied: async-generator>=1.9 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.10)
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Requirement already satisfied: attrs>=19.2.0 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (21.4.0)
Requirement already satisfied: idna in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (3.3)
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Requirement already satisfied: PySocks!=1.5.7,<2.0,>=1.5.6 in c:\users\chand\anaconda3\lib\site-packages (from urllib3[socks]~=1.26->selenium) (1.7.1)
Requirement already satisfied: h11<1,>=0.9.0 in c:\users\chand\anaconda3\lib\site-packages (from wsproto>=0.14->trio-websocket~=0.9->selenium) (0.14.0)

```

In [2]: driver = webdriver.Chrome(r'Chromedriver.exe')

```

C:\Users\chand\AppData\Local\Temp\ipykernel_32664\614866241.py:1: DeprecationWarning: executable_path has been deprecated, please pass in a Service object
  driver = webdriver.Chrome(r'Chromedriver.exe')

```

In [3]: driver.get('http://www.flipkart.com/')

In [4]: login=driver.find_element(By.XPATH, '/html/body/div[2]/div/div/button')
login.click()

7. In [5]: i=input("Enter the phone name : ")

```
In [5]: j=input("Enter the phone name : ")
search = driver.find_element(By.XPATH, '/html/body/div[1]/div/div[1]/div[1]/div[2]/div[2]/form/div/div/input')
search.send_keys(j)
search_key = driver.find_element(By.XPATH, '/html/body/div[1]/div/div[1]/div[1]/div[2]/div[2]/form/div/button')
search_key.click()
```

Enter the phone name : OnePlus Nord

```
In [6]: phone_urls=[]
url = driver.find_elements(By.XPATH, '//a[@class="_1fQZEK"]')
for i in url:
    phone_urls.append(i.get_attribute('href'))
time.sleep(2)
```

```
In [7]: len(phone_urls)
```

```
Out[7]: 24
```

```
In [8]: phone_name=[]

for url in phone_urls:
    driver.get(url)
    time.sleep(2)

    try:
        name=driver.find_elements(By.XPATH, '//div[@class="_4rR01T"]')
        for i in name:
            Phone_name.append(i.text)
    except NoSuchElementException:
        Phone_name('-')
```

```
In [9]: len(phone_name)
```

```
Out[9]: 0
```

```
In [10]: Name=[]
for url in phone_urls:
    driver.get(url)
    time.sleep(2)
    name=driver.find_elements(By.XPATH, '//span[@class="B_NuCI"]')
    for i in name:
        Name.append(i.text)
```

```
In [11]: len(Name)
```

```
Out[11]: 24
```

```
In [19]: Price=[]
for url in phone_urls:
    driver.get(url)
    time.sleep(2)

    try:
        price = driver.find_elements(By.XPATH, '//div[@class="_30jeq3 _16Jk6d"]')
        for i in price:
            Price.append(i.text)

    except NoSuchElementException:
        Price.append('-')
```

```
In [20]: len(Price)
```

```
Out[20]: 24
```

```
In [29]: dg=pd.DataFrame({'NAME':Name, 'PRICE':Price, 'PHONE_URL':phone_urls})
```

```
In [30]: dg
```

Out[30]:

		NAME	PRICE	PHONE_URL
0	OnePlus Nord CE 2 Lite 5G (Black Dusk, 128 GB)...		₹19,626	https://www.flipkart.com/oneplus-nord-ce-2-lit...
1	OnePlus Nord CE 2 Lite 5G (Blue Tide, 128 GB) ...		₹19,948	https://www.flipkart.com/oneplus-nord-ce-2-lit...
2	OnePlus Nord CE 2 Lite 5G (Blue Tide, 128 GB) ...		₹21,998	https://www.flipkart.com/oneplus-nord-ce-2-lit...
3	OnePlus Nord CE 5G (Charcoal Ink, 128 GB) (8 ...		₹24,990	https://www.flipkart.com/oneplus-nord-ce-5g-ch...
4	OnePlus Nord 2T 5G (Jade Fog, 128 GB) (8 GB RAM)		₹28,981	https://www.flipkart.com/oneplus-nord-2t-5g-ja...
5	OnePlus Nord 2 5G (Gray Sierra, 128 GB) (8 GB...		₹29,999	https://www.flipkart.com/oneplus-nord-2-5g-gra...
6	OnePlus Nord CE 5G (Charcoal Ink, 256 GB) (12...		₹27,900	https://www.flipkart.com/oneplus-nord-ce-5g-ch...
7	OnePlus Nord CE 5G (Blue Void, 256 GB) (12 GB...		₹27,900	https://www.flipkart.com/oneplus-nord-ce-5g-bl...
8	OnePlus Nord 2T 5G (Gray Shadow, 128 GB) (8 G...		₹28,949	https://www.flipkart.com/oneplus-nord-2t-5g-gr...
9	OnePlus Nord CE 2 Lite 5G (Black Dusk, 128 GB)...		₹20,999	https://www.flipkart.com/oneplus-nord-ce-2-lit...
10	OnePlus Nord CE 2 5G (Gray Mirror, 128 GB) (6...		₹23,999	https://www.flipkart.com/oneplus-nord-ce-2-5g-...
11	OnePlus Nord 2 5G (Blue Haze, 256 GB) (12 GB ...		₹33,998	https://www.flipkart.com/oneplus-nord-2-5g-blu...
12	OnePlus Nord 2 5G (Blue Haze, 128 GB) (8 GB RAM)		₹29,799	https://www.flipkart.com/oneplus-nord-2-5g-blu...
13	OnePlus Nord CE 2 5G (Bahama Blue, 128 GB) (8...		₹24,999	https://www.flipkart.com/oneplus-nord-ce-2-5g-...
14	OnePlus Nord CE 2 5G (Gray Mirror, 128 GB) (8...		₹24,990	https://www.flipkart.com/oneplus-nord-ce-2-5g-...
15	OnePlus Nord CE 5G (Charcoal Ink, 128 GB) (6 ...		₹20,999	https://www.flipkart.com/oneplus-nord-ce-5g-ch...
16	OnePlus Nord CE 5G (Blue Void, 128 GB) (6 GB ...		₹22,999	https://www.flipkart.com/oneplus-nord-ce-5g-bl...
17	OnePlus Nord CE 5G (Silver Gray, 128 GB) (8 G...		₹24,999	https://www.flipkart.com/oneplus-nord-ce-5g-si...
18	OnePlus Nord CE 5G (Silver Ray, 128 GB) (6 GB...		₹24,499	https://www.flipkart.com/oneplus-nord-ce-5g-si...
19	OnePlus Nord CE 5G (Silver Ray, 256 GB) (12 G...		₹26,999	https://www.flipkart.com/oneplus-nord-ce-5g-si...
20	OnePlus Nord CE 2 Lite 5G (Black Dusk, 128 GB)...		₹19,999	https://www.flipkart.com/oneplus-nord-ce-2-lit...
21	OnePlus Nord CE 5G (Blue Void, 128 GB) (8 GB ...		₹24,989	https://www.flipkart.com/oneplus-nord-ce-5g-bl...
22	OnePlus Nord CE 2 5G (Bahama Blue, 128 GB) (6...		₹23,990	https://www.flipkart.com/oneplus-nord-ce-2-5g-...
23	OnePlus Nord 2T 5G (Jade Fog, 256 GB) (12 GB ...		₹32,990	https://www.flipkart.com/oneplus-nord-2t-5g-ja...

In []:

Question NO 5 Answer

In []:

In [85]:

```
!pip install selenium
import selenium
import pandas as pd
from selenium import webdriver
from selenium.common.Exceptions import StaleElementReferenceException, NoSuchElementException
from selenium.webdriver.common.by import By
import time
```

Requirement already satisfied: selenium in c:\users\chand\anaconda3\lib\site-packages (4.8.0)
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 Requirement already satisfied: attrs>=19.2.0 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (21.4.0)
 Requirement already satisfied: pycparser in c:\users\chand\anaconda3\lib\site-packages (from cffi>=1.14->trio~=0.17->selenium) (2.21)
 Requirement already satisfied: wsproto>=0.14 in c:\users\chand\anaconda3\lib\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:\users\chand\anaconda3\lib\site-packages (from urllib3[socks]~=1.26->selenium) (1.7.1)
 Requirement already satisfied: h11<1,>=0.9.0 in c:\users\chand\anaconda3\lib\site-packages (from wsproto>=0.14->trio-websocket~=0.9->selenium) (0.14.0)

```
-----
ModuleNotFoundError                                Traceback (most recent call last)
Input In [85], in <cell line: 5>()
      3 import pandas as pd
      4 from selenium import webdriver
----> 5 from selenium.common.Exceptions import StaleElementReferenceException, NoSuchElementException
      6 from selenium.webdriver.common.by import By
      7 import time
```

ModuleNotFoundError: No module named 'selenium.common.Exceptions'

In [86]: driver=webdriver.Chrome(r'Chromedriver.exe')

C:\Users\chand\AppData\Local\Temp\ipykernel_20112\413822959.py:1: DeprecationWarning: executable_path has been deprecated, please pass in a Service object
 driver=webdriver.Chrome(r'Chromedriver.exe')

In [87]: driver.get('https://www.google.co.in/maps')

In [88]: h=input("Enter any location name : ")
 search=driver.find_element(By.CLASS_NAME,'tactile-searchbox-input')
 search.send_keys(h)
 search_=driver.find_element(By.CLASS_NAME,'mL3xi')
 search_.click()

Enter any location name : bangalore

In [91]: try:
 url_string = driver.current_url
 print("URL Extracted: ", url_string)
 lat_lng=re.findall(r'@(12.9538477,77.3507398,10z)data',url_string)

```
Input In [91]
print("URL Extracted: ", url_string):
^
```

SyntaxError: invalid syntax

Question NO 6 Answer

In [1]: !pip install selenium
 import selenium
 import pandas as pd
 from selenium.common.exceptions import StaleElementReferenceException, NoSuchElementException
 from selenium import webdriver
 from selenium.webdriver.common.by import By
 import time

Requirement already satisfied: selenium in c:\users\chand\anaconda3\lib\site-packages (4.8.0)
 Requirement already satisfied: urllib3[socks]~=1.26 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (1.26.9)
 Requirement already satisfied: trio-websocket~=0.9 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (0.9.2)
 Requirement already satisfied: trio~=0.17 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (0.22.0)
 Requirement already satisfied: certifi>=2021.10.8 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (2021.10.8)
 Requirement already satisfied: sniffio in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.2.0)
 Requirement already satisfied: sortedcontainers in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (2.4.0)
 Requirement already satisfied: outcome in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.2.0)
 Requirement already satisfied: cffi>=1.14 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.15.0)
 Requirement already satisfied: idna in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (3.3)
 Requirement already satisfied: exceptiongroup>=1.0.0rc9 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.1.0)
 Requirement already satisfied: attrs>=19.2.0 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (21.4.0)
 Requirement already satisfied: async-generator>=1.9 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.10)
 Requirement already satisfied: pycparser in c:\users\chand\anaconda3\lib\site-packages (from cffi>=1.14->trio~=0.17->selenium) (2.21)
 Requirement already satisfied: wsproto>=0.14 in c:\users\chand\anaconda3\lib\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:\users\chand\anaconda3\lib\site-packages (from urllib3[socks]~=1.26->selenium) (1.7.1)
 Requirement already satisfied: h11<1,>=0.9.0 in c:\users\chand\anaconda3\lib\site-packages (from wsproto>=0.14->trio-websocket~=0.9->selenium) (0.14.0)

```
In [2]: driver = webdriver.Chrome(r'Chromedriver.exe')
```

C:\Users\chand\AppData\Local\Temp\ipykernel_14828\614866241.py:1: DeprecationWarning: executable_path has been deprecated, please pass in a Service object
 driver = webdriver.Chrome(r'Chromedriver.exe')

```
In [5]: driver.get('https://www.digit.in/')
```

```
In [6]: gaming=driver.find_element(By.XPATH,'//a[@class="arrow_down gaming"]')
gaming.click()
```

```
In [8]: best_gaming=driver.find_element(By.XPATH,'/html/body/div[2]/div/ul/li[5]/div[2]/div/div[2]/div/ul[3]/li[4]/a')
best_gaming.click()
```

```
In [9]: auses=driver.find_element(By.XPATH,'/html/body/div[3]/div/div[2]/div[2]/span/a/img')
auses.click()
```

```
In [10]: Auses =[]
auses=driver.find_elements(By.XPATH,'//h3[@class="ga-not-fired"]')
for i in auses:
    Auses.append(i.text)
len(Auses)
```

```
Out[10]: 6
```

```
In [12]: dg= pd.DataFrame(Auses)
```

```
In [13]: dg
```

```
Out[13]:
```

	0
0	01. ASUS TUF Gaming
1	02. ASUS Zephyrus G14
2	03. ASUS Vivobook Pro 14 OLED
3	04. ASUS ROG Strix G15
4	05. ASUS TUF DASH F15
5	06. ASUS ROG Flow X13

```
In [ ]:
```

Question NO 7 Answer

```
In [1]: !pip install selenium
!pip install bs4
!pip install requests
```



```
import requests
import selenium
from bs4 import BeautifulSoup
from selenium import webdriver
from selenium.webdriver.common.by import By
from selenium.common.exceptions import StaleElementReferenceException, NoSuchElementException
import time
```

```
Requirement already satisfied: selenium in c:\users\chand\anaconda3\lib\site-packages (4.8.0)
Requirement already satisfied: trio~=0.17 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (0.22.0)
Requirement already satisfied: certifi>=2021.10.8 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (2021.10.8)
Requirement already satisfied: urllib3[socks]~=1.26 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (1.26.9)
Requirement already satisfied: trio-websocket~=0.9 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (0.9.2)
Requirement already satisfied: idna in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (3.3)
Requirement already satisfied: cffi>=1.14 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.15.0)
Requirement already satisfied: attrs>=19.2.0 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (21.4.0)
Requirement already satisfied: exceptiongroup>=1.0.0rc9 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.1.0)
Requirement already satisfied: outcome in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.2.0)
Requirement already satisfied: sortedcontainers in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (2.4.0)
Requirement already satisfied: async-generator>=1.9 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.10)
Requirement already satisfied: sniffio in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.2.0)
Requirement already satisfied: pycparser in c:\users\chand\anaconda3\lib\site-packages (from cffi>=1.14->trio~=0.17->selenium) (2.21)
Requirement already satisfied: wsproto>=0.14 in c:\users\chand\anaconda3\lib\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:\users\chand\anaconda3\lib\site-packages (from urllib3[socks]~=1.26->selenium) (1.7.1)
Requirement already satisfied: h11<1,>=0.9.0 in c:\users\chand\anaconda3\lib\site-packages (from wsproto>=0.14->trio-websocket~=0.9->selenium) (0.14.0)
Requirement already satisfied: bs4 in c:\users\chand\anaconda3\lib\site-packages (0.0.1)
Requirement already satisfied: beautifulsoup4 in c:\users\chand\anaconda3\lib\site-packages (from bs4) (4.11.1)
Requirement already satisfied: soupsieve>1.2 in c:\users\chand\anaconda3\lib\site-packages (from beautifulsoup4->bs4) (2.3.1)
Requirement already satisfied: requests in c:\users\chand\anaconda3\lib\site-packages (2.27.1)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\chand\anaconda3\lib\site-packages (from requests) (2021.10.8)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\chand\anaconda3\lib\site-packages (from requests) (1.26.9)
Requirement already satisfied: idna<4,>=2.5 in c:\users\chand\anaconda3\lib\site-packages (from requests) (3.3)
Requirement already satisfied: charset-normalizer~=2.0.0 in c:\users\chand\anaconda3\lib\site-packages (from requests) (2.0.4)
```

```
In [11]: driver=webdriver.Chrome(r'Chromedriver.exe')
```

```
C:\Users\chand\AppData\Local\Temp\ipykernel_11508\413822959.py:1: DeprecationWarning: executable_path has been deprecated, please pass in a Service object
  driver=webdriver.Chrome(r'Chromedriver.exe')
```

```
In [12]: driver.get('https://www.forbes.com/?sh=6164a7032254')
```

```
In [13]: dash_board=driver.find_element(By.XPATH, '//div[@class="_8FT-x3t4"]')
dash_board.click()
```

```
In [14]: bi = driver.find_element(By.XPATH, '//div[@class="mpBfVZz3"]')
bi.click()
```

```
In [15]: all_bi = driver.find_element(By.XPATH, '/html/body/div[1]/header/nav/div[1]/div/div/div[2]/ul/li[1]/div[2]/div[3]')
all_bi.click()
```

```
In [16]: Name = []

name= driver.find_elements(By.XPATH, '//div[@class="personName"]')
for i in name:
    Name.append(i.text)
```

```
In [17]: Rank = []

rank = driver.find_elements(By.XPATH, '//div[@class="rank"]')
for i in rank:
    Rank.append(i.text)
```

```
In [18]: print(len(Name),len(Rank))
```

```
200 200
```

```
In [19]: Net_worth = []

net_worth=driver.find_elements(By.XPATH,'//div[@class="netWorth"]')
for i in net_worth:
    Net_worth.append(i.text)

Age = []

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

Citizenship= []

citizenship = driver.find_elements(By.XPATH,'//div[@class="countryOfCitizenship"]')
for i in citizenship:
    Citizenship.append(i.text)

Source = []

source= driver.find_elements(By.XPATH,'//div[@class="source"]')
for i in source:
    Source.append(i.text)
```

```
In [20]: print(len(Net_worth),len(Age),len(Citizenship),len(Source))

200 200 200 200
```

```
In [22]: import pandas as pd
ds = pd.DataFrame({"NAME":Name, "RANK":Rank, "NET WORTH":Net_worth, "AGE":Age, "CITIZENSHIP":Citizenship, "SOURCE":S
```

```
In [23]: ds.head()
```

```
Out[23]:
```

	NAME	RANK	NET WORTH	AGE	CITIZENSHIP	SOURCE
0	Elon Musk	1.	\$219 B		United States	Tesla, SpaceX
1	Jeff Bezos	2.	\$171 B		United States	Amazon
2	Bernard Arnault & family	3.	\$158 B		France	LVMH
3	Bill Gates	4.	\$129 B		United States	Microsoft
4	Warren Buffett	5.	\$118 B		United States	Berkshire Hathaway

Question NO 8 Answer

```
In [24]: !pip install selenium
import selenium
import pandas as pd
from selenium import webdriver
from selenium.common.exceptions import StaleElementReferenceException, NoSuchElementException
from selenium.webdriver.common.by import By
import time
```

```
In [25]: driver = webdriver.Chrome(r'Chromedriver.exe')

C:\Users\chand\AppData\Local\Temp\ipykernel_11508\614866241.py:1: DeprecationWarning: executable_path has been
deprecated, please pass in a Service object
  driver = webdriver.Chrome(r'Chromedriver.exe')
```

```
In [26]: driver.get('https://www.youtube.com/')
```

```
In [28]: you_tube = driver.find_element(By.XPATH, '/html/body/ytd-app/div[1]/ytd-page-manager/ytd-browse/ytd-two-column-b
you_tube.click()
```

```
In [29]: for _ in range(500):
         driver.execute_script("window.scrollTo(0,500)")
         time.sleep(2)
```

```
In [32]: Comments = []

comments=driver.find_elements(By.CLASS_NAME,'style-scope ytd-comment-renderer')
for i in comments[0:500]:
    Comments.append(i.text)
```

```
In [33]: len(Comments)
```

Out[33]: 500

```
In [34]: cd=pd.DataFrame({"COMMENTS":Comments})
```

Out [35]: **COMMENTS**

500 rows \times 1 columns

Question NO 9 Answer

```
In [32]: !pip install selenium
import selenium
import pandas as pd
import time
from selenium.common.exceptions import StaleElementReferenceException, NoSuchElementException
from selenium import webdriver
from selenium.webdriver.common.by import By
```

```
Requirement already satisfied: selenium in c:\users\chand\anaconda3\lib\site-packages (4.8.0)
Requirement already satisfied: trio-websocket~=0.9 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (0.9.2)
Requirement already satisfied: urllib3[socks]~=1.26 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (1.26.9)
Requirement already satisfied: trio~=0.17 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (0.22.0)
Requirement already satisfied: certifi>=2021.10.8 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (2021.10.8)
Requirement already satisfied: outcome in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.2.0)
Requirement already satisfied: sniffio in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.2.0)
Requirement already satisfied: async-generator>=1.9 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.10)
Requirement already satisfied: cffi>=1.14 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.15.0)
Requirement already satisfied: sortedcontainers in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (2.4.0)
Requirement already satisfied: idna in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (3.3)
Requirement already satisfied: exceptiongroup>=1.0.0rc9 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.1.0)
Requirement already satisfied: attrs>=19.2.0 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (21.4.0)
Requirement already satisfied: pycparser in c:\users\chand\anaconda3\lib\site-packages (from cffi>=1.14->trio~=0.17->selenium) (2.21)
Requirement already satisfied: wsproto>=0.14 in c:\users\chand\anaconda3\lib\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:\users\chand\anaconda3\lib\site-packages (from urllib3[socks]~=1.26->selenium) (1.7.1)
Requirement already satisfied: h11<1,>=0.9.0 in c:\users\chand\anaconda3\lib\site-packages (from wsproto>=0.14->trio-websocket~=0.9->selenium) (0.14.0)
```

```
In [33]: driver = webdriver.Chrome(r'Chromedriver.exe')
```

```
C:\Users\chand\AppData\Local\Temp\ipykernel_34692\614866241.py:1: DeprecationWarning: executable_path has been deprecated, please pass in a Service object
    driver = webdriver.Chrome(r'Chromedriver.exe')
```

```
In [34]: driver.get('https://www.hostelworld.com/')

```

```
In [35]: menu = driver.find_element(By.XPATH, '/html/body/div[3]/div/div/div[2]/div[2]/div/div/div[1]/header/div/button[2]')
menu.click()
```

```
In [36]: hostels = driver.find_element(By.XPATH,'/html/body/div[3]/div/div/div[2]/div[2]/div/div/div[1]/header/div[2]/di
hostels.click()
```

```
In [37]: search = driver.find_element(By.XPATH, '//input[@class="search-input"]')
search.send_keys('London')
```

```
In [38]: location = driver.find_element(By.XPATH, '/html/body/div[3]/div/div/div[3]/div/div[1]/div/div/div[1]/div/div/ul/
location.click()
```

```
In [39]: search_key=driver.find_element(By.XPATH, '/html/body/div[3]/div/div/div[3]/div/div[1]/div/div/div[5]/button')
search_key.click()
```

```
In [40]: Hostel_urls=[]

url=driver.find_elements(By.XPATH,'//a[@class="property-card-container horizontal"]')
for i in url[0:10]:
    Hostel_urls.append(i.get_attribute("href"))
time.sleep(2)
```

```
In [41]: len(Hostel urls)
```

```
Out[41]: 10
```

```
In [42]: Hostel urls
```

```
Out[42]: ["https://www.hostelworld.com/pwa/hosteldetails.php/St%20Christopher's%20Village/London/502?from=2023-03-09&to=2023-03-12&guests=2",
'https://www.hostelworld.com/pwa/hosteldetails.php/Hostel%20One%20Notting%20Hill/London/291433?from=2023-03-09&to=2023-03-12&guests=2',
'https://www.hostelworld.com/pwa/hosteldetails.php/Generator%20London/London/510?from=2023-03-09&to=2023-03-12&guests=2',
'https://www.hostelworld.com/pwa/hosteldetails.php/Safestay%20London%20Elephant%20&%20Castle/London/55551?from=2023-03-09&to=2023-03-12&guests=2',
'https://www.hostelworld.com/pwa/hosteldetails.php/Urbany%20Hostel%20London/London/303427?from=2023-03-09&to=2023-03-12&guests=2',

'https://www.hostelworld.com/pwa/hosteldetails.php/Safestay%20London%20Kensington%20Holland%20Park/London/93920?from=2023-03-09&to=2023-03-12&guests=2',
'https://www.hostelworld.com/pwa/hosteldetails.php/No.8%20Seven%20Sisters/London/91108?from=2023-03-09&to=2023-03-12&guests=2',
"https://www.hostelworld.com/pwa/hosteldetails.php/St%20Christopher's%20Hammersmith/London/20976?from=2023-03-09&to=2023-03-12&guests=2",
"https://www.hostelworld.com/pwa/hosteldetails.php/St%20Christopher's%20Inn%20-%20London%20Bridge/London/503?from=2023-03-09&to=2023-03-12&guests=2",
"https://www.hostelworld.com/pwa/hosteldetails.php/St%20Christopher's%20Inn%20-%20Liverpool%20Street/London/271698?from=2023-03-09&to=2023-03-12&guests=2"]
```

```
In [43]: Name = []
for url in Hostel_urls:
    driver.get(url)
    time.sleep(2)

    try:
        name = driver.find_elements(By.XPATH, '//*[@class="property-name"]')
        for i in name:
            Name.append(i.text)
    except NoSuchElementException:
        Name.append('-')
```

```
In [47]: Name=[]
Price=[]
Rating=[]
Total_review=[]

for url in Hostel_urls[:10]:
    driver.get(url)
    time.sleep(5)

    try:
        names=driver.find_elements(By.XPATH, '//*[@class="title-2"]')
        for i in names:
            Name.append(i.text)

        rating = driver.find_elements(By.XPATH, '//*[@class="score orange big"]')
        for i in rating:
            Rating.append(i.text)

        total_review=driver.find_elements(By.XPATH, '//*[@class="score orange big"]')
        for i in total_review:
            Total_review.append(i.text)

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

    except NoSuchElementException:
        Name.append('-')
        Price.append('-')
        Rating.append('-')
        Total_review.append('-')
```

```
In [48]: print(len(Name),len(Price),len(Rating),len(Total_review))

10 77 18 18
```

```
In [56]: hh=pd.DataFrame({'NAME':Name, 'HOSTEL_URL':Hostel_urls})
```

```
In [57]: hh
```

Out[57]:

	NAME	HOSTEL_URL
0	St Christopher's Village	https://www.hostelworld.com/pwa/hosteldetails....
1	Hostel One Notting Hill	https://www.hostelworld.com/pwa/hosteldetails....
2	Generator London	https://www.hostelworld.com/pwa/hosteldetails....
3	Safestay London Elephant & Castle	https://www.hostelworld.com/pwa/hosteldetails....
4	Urbany Hostel London	https://www.hostelworld.com/pwa/hosteldetails....
5	Safestay London Kensington Holland Park	https://www.hostelworld.com/pwa/hosteldetails....
6	No.8 Seven Sisters	https://www.hostelworld.com/pwa/hosteldetails....
7	St Christopher's Hammersmith	https://www.hostelworld.com/pwa/hosteldetails....
8	St Christopher's Inn - London Bridge	https://www.hostelworld.com/pwa/hosteldetails....
9	St Christopher's Inn - Liverpool Street	https://www.hostelworld.com/pwa/hosteldetails....

Question NO 8 Answer

In [80]:

```
!pip install selenium
import pandas as pd
import selenium
from selenium import webdriver
from selenium.common.exceptions import StaleElementReferenceException, NoSuchElementException
from selenium.webdriver.common.by import By
```

Requirement already satisfied: selenium in c:\users\chand\anaconda3\lib\site-packages (4.8.0)
Requirement already satisfied: trio-websocket~=0.9 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (0.9.2)
Requirement already satisfied: urllib3[socks]~=1.26 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (1.26.9)
Requirement already satisfied: certifi>=2021.10.8 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (2021.10.8)
Requirement already satisfied: trio~=0.17 in c:\users\chand\anaconda3\lib\site-packages (from selenium) (0.22.0)
Requirement already satisfied: exceptiongroup>=1.0.0rc9 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.1.0)
Requirement already satisfied: outcome in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.2.0)
Requirement already satisfied: sortedcontainers in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (2.4.0)
Requirement already satisfied: idna in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (3.3)
Requirement already satisfied: async-generator>=1.9 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.10)
Requirement already satisfied: cffi>=1.14 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.15.0)
Requirement already satisfied: attrs>=19.2.0 in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (21.4.0)
Requirement already satisfied: sniffio in c:\users\chand\anaconda3\lib\site-packages (from trio~=0.17->selenium) (1.2.0)
Requirement already satisfied: pycparser in c:\users\chand\anaconda3\lib\site-packages (from cffi>=1.14->trio~=0.17->selenium) (2.21)
Requirement already satisfied: wsproto>=0.14 in c:\users\chand\anaconda3\lib\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:\users\chand\anaconda3\lib\site-packages (from urllib3[socks]~=1.26->selenium) (1.7.1)
Requirement already satisfied: h11<1,>=0.9.0 in c:\users\chand\anaconda3\lib\site-packages (from wsproto>=0.14->trio-websocket~=0.9->selenium) (0.14.0)

In [76]:

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

C:\Users\chand\AppData\Local\Temp\ipykernel_34692\413822959.py:1: DeprecationWarning: executable_path has been deprecated, please pass in a Service object
driver=webdriver.Chrome(r'Chromedriver.exe')

In [77]:

```
driver.get('https://www.youtube.com/')
```

In [78]:

```
search_input=driver.find_element(By.XPATH, '/html/body/ytd-app/div[1]/div/ytd-masthead/div[4]/div[2]/ytd-searchbox/div[1]/input')
search_input.send_keys("natu natu song")
search=driver.find_element(By.XPATH, '/html/body/ytd-app/div[1]/div/ytd-masthead/div[4]/div[2]/ytd-searchbox/button')
search.click()
```

In [79]:

```
song=driver.find_element(By.XPATH, '/html/body/ytd-app/div[1]/ytd-page-manager/ytd-search/div[1]/ytd-two-column-search-results/div[1]/ytd-video-list-renderer/div[1]/ytd-video-thumbnail/div[1]/img')
song.click()
```

In [81]:

```
for _ in range(500):
    driver.execute_script("window.scrollTo(0,500)")
    time.sleep(2)
```

In [82]:

```
Comments = []
```

```
comments=driver.find_elements(By.CLASS_NAME,'style-scope ytd-comment-renderer')
for i in comments[0:500]:
    Comments.append(i.text)
```

```
In [83]: len(Comments)
```

Out[83]: 500

```
In [84]: rr=pd.DataFrame({'COMMENTS':Comments})
```

```
In [85]: rr
```

Out[85]:

	COMMENTS
0	Mubeena Serin\n4 days ago (edited)\nSuper...im...
1	Rosines Araujo\n1 day ago\nAMEI ESSA DANÇA ELA...
2	Neha yadav\n4 days ago\nMy kookie also sing th...
3	Daughter of India and child of world \n19 hou...
4	Punit Jopin\n4 days ago\nI can't believe jk li...
...	...
495	purple house \n4 days ago\nWho is here after ...
496	Saipallavi\n5 days ago\nMM Keeravani sir Music...
497	GMBP\n1 day ago\nBrilliant film!!\nReply
498	yashwanth s aradhya\n2 months ago\nThis song w...
499	Ajay Sasmal\n1 month ago (edited)\nMakes ourse...

500 rows × 1 columns

```
In [ ]:
```