

7. Write a program to scrap all the available details of top 10 gaming laptops from digit.in.

In [1]:

```
#import all the required Libraries
import pandas as pd
import selenium
from selenium import webdriver
from selenium.common.exceptions import StaleElementReferenceException, NoSuchElementException
import time
import re
```

In [11]:

```
driver = webdriver.Chrome(r"C:\Users\raju4\AppData\Local\Temp\Rar$EXa8584.2049\chromedriver.exe")
```

```
C:\Users\raju4\AppData\Local\Temp/ipykernel_9284/3140744241.py:1: DeprecationWarning: executable_path has been deprecated, please pass in a Service object
    driver = webdriver.Chrome(r"C:\Users\raju4\AppData\Local\Temp\Rar$EXa8584.2049\chromedriver.exe")
```

In [12]:

```
url="https://www.digit.in/top-products/best-gaming-laptops-40.html"
```

In [13]:

```
driver.get(url)
```

In [14]:

```
Brands=[]
Products_Description=[]
Specification=[]
Price=[]
```

In [15]:

```
br=driver.find_elements_by_xpath("//div[@class='TopNumbeHeading active sticky-footer']")
len(br)
```

```
C:\Users\raju4\AppData\Local\Temp/ipykernel_9284/1994947974.py:1: DeprecationWarning: find_elements_by_xpath is deprecated. Please use find_elements(by=By.XPATH, value=xpath) instead
```

```
    br=driver.find_elements_by_xpath("//div[@class='TopNumbeHeading active sticky-footer']")
r'"])
```

Out[15]:

```
10
```

In [16]:

```
for i in br:
    Brands.append(str(i.text).replace("\n",""))
Brands
```

Out[16]:

```
['1.MSI RAIDER GE76',
 '2.ASUS ROG STRIX SCAR 15',
 '3.ACER NITRO 5',
 '4.MSI STEALTH 15M',
 '5.ASUS ROG STRIX SCAR 15',
```

```
'6.ASUS ROG STRIX SCAR 15',
'7.ASUS ZEPHYRUS G14',
'8.HP OMEN 16',
'9.ASUS ROG ZEPHYRUS DUO 15',
'10.ACER ASPIRE 7 GAMING LAPTOP']
```

In [17]:

```
sp=driver.find_elements_by_xpath("//div[@class='Specs-Wrap']")
len(sp)
```

C:\Users\raju4\AppData\Local\Temp\ipykernel_9284/2723260401.py:1: DeprecationWarning: find_elements_by_xpath is deprecated. Please use find_elements(by=By.XPATH, value=xpath) instead

```
sp=driver.find_elements_by_xpath("//div[@class='Specs-Wrap']")
```

Out[17]:

```
for i in sp:
    Specification.append(str(i.text).replace("\n",""))
Specification
```

Out[18]:

```
['OSWINDOWS 11 HOMEDIPLAY17" (3840 X 2160)PROCESSOR12TH GEN INTEL CORE I9-12900HK | 5 GHZMEMORY2 TB SSD/16 GBGB DDR5',
 'OSWINDOWS 11 HOMEDIPLAY15.6" (2560 X 1440)PROCESSOR12TH GEN INTEL CORE I9-12900H | 2.5 GHZMEMORY2 TB SSD/32 GBGB DDR5',
 'OSWINDOWS 10DISPLAY15.6" (1920 X 1080)PROCESSORAMD RYZEN 9 OCTA CORE | 2.4 GHZMEMORY1 TB HDD/16 GBGB DDR4',
 'OSWINDOWS 10DISPLAY15.6" (1920 X 1080)PROCESSORINTEL CORE I7 11TH GEN - 11375H | NAMEMORY1 TB SSD/16 GBGB DDR4',
 'OSWINDOWS 10DISPLAY15.6" (2560 X 1440)PROCESSORAMD RYZEN 9 OCTA CORE - 5900HX | 3.3 GHZMEMORY2 TB SSD/32 GBGB DDR4',
 'OSWINDOWS 10 HOMEDIPLAY15.6" (1920 X 1080)PROCESSORAMD RYZEN™ 9 5900HX | 3.3 GHZMEMORY1 Y1 TB SSD/16 GBGB DDR4',
 'OSWINDOWS 10 HOMEDIPLAY14" (1920 X 1080)PROCESSORAMD 3RD GEN RYZEN 9 | 3.3 GHZMEMORY1 TB SSD/16 GBGB DDR4',
 'OSWINDOWS 11 HOMEDIPLAY16.1" (1920 X 1080)PROCESSOR12TH GEN INTEL CORE I7-12700H | 4.7 GHZMEMORY1 TB SSD/16 GBGB DDR4',
 'OSWINDOWS 10DISPLAY15.6" (3840 X 1100)PROCESSORINTEL CORE I7 10TH GEN 10875H | NAMEMORY512 GB SSD/4 GBGB DDR4',
 'OSWINDOWS 10 HOMEDIPLAY15.6" (1920 X 1080)PROCESSORAMD RYZEN™ 5-5500U HEXA-CORE | NAMEMORY512 GB SSD/8 GBGB DDR4']
```

In [19]:

```
des=driver.find_elements_by_xpath("//div[@class='Section-center']")
len(des)
```

C:\Users\raju4\AppData\Local\Temp\ipykernel_9284/1938359309.py:1: DeprecationWarning: find_elements_by_xpath is deprecated. Please use find_elements(by=By.XPATH, value=xpath) instead

```
des=driver.find_elements_by_xpath("//div[@class='Section-center']")
```

Out[19]:

```
for i in des:
    Products_Description.append(str(i.text).replace("\n",""))
Products_Description
```

Out[20]: ['Possibly the most high-end gaming laptop anyone can buy is the MSI Raider GTE76 2022 edition. Last year's model was impressive that it won the Digit Zero 1 award for the best gaming laptop bar none. The current year model is no different either. It comes with an Intel 12th Gen Core i9-12900HK chip, which is a 14-core, 20-thread CPU. It is probably the most powerful processor in a laptop at the time of writing this article. It is paired with an equally capable Nvidia GeForce RTX 3080 Ti with 16GB GDDR6 VRAM featuring 175W TGP. The laptop also features 32GB DDR5 memory running in Quad-channel mode. To top it all off, the MSI Raider GE76 also comes equipped with a 2TB NVMe PCIe Gen 4 SSD to load all your files and games in an instant. If you have the budget, then the MSI Raider GE76 stands top of the list of the best gaming laptops and it'll do so probably for a while now.
SPECIFICATIONOS : Windows 11 Home
Display : 17" (3840 x 2160)
Processor : 12th Gen Intel Core i9-12900HK | 5 GHz
Memory : 2 TB SSD/16 GBGB DDR5
Weight : 2.9D
Dimension : 397 x 284 x 26
Graphics Processor : NVIDIA GeForce RTX 3080Ti
AVAILABLE ₹ 429,940BUY NOWBUY ON EMI ₹ 7,165/MONTHGET EMI*0% Interest*0 Down Payment*No Processing Fee',

'The second high-end gaming laptop on the list is the ASUS ROG Strix Scar 15 featuring an Intel 12th Gen Core i9-12900H CPU and an Nvidia RTX 3080 Ti GPU. The Intel chip is a little slower than the Core i9-12900HK mostly in multicore performance, but in most applications, the user will hardly notice a major difference. Both, the Intel Core i9-12900H K and the i9-12900H can hit the 5.00GHz boost clock, which is also a good thing. The top gaming laptop features an Nvidia RTX 3080 Ti GPU with 16GB GDDR6 VRAM and 150W TGP. The ASUS ROG Strix Scar 15 also features 32GB DDR5 memory running in quad-channel mode. For easy and fast access to all your files, the ASUS ROG Strix Scar 15 comes equipped with a PCI Gen 4 SSD as well. Overall, it is one of the top gaming laptops in India that money can buy.
SPECIFICATIONOS : Windows 11 Home
Display : 15.6" (2560 x 1440)
Processor : 12th Gen Intel Core i9-12900H | 2.5 GHz
Memory : 2 TB SSD/32 GBGB DDR5
Weight : 2.3D
Dimension : 259 x 354 x 27
Graphics Processor : NVIDIA GeForce RTX 3070 Ti
AVAILABLE ₹ 285,390BUY NOWBUY ON EMI ₹ 47,565/MONTHGET EMI*0% Interest*0 Down Payment*No Processing Fee',

'Possibly the best value-for-money gaming laptop on the market, the Acer Nitro 5 checks all the right boxes. It features an ultra-fast Ryzen 9 Octa-Core processor paired with an RTX 3070 GPU. The high-end gaming laptop comes with 16GB RAM, 256GB SSD, 1TB SSD and a 15.6-inch FHD display.
SPECIFICATIONOS : Windows 10
Display : 15.6" (1920 x 1080)
Processor : AMD Ryzen 9 Octa Core | 2.4 GHz
Memory : 1 TB HDD/16 GBGB DDR4
Weight : 2.4D
Dimension : 363.4 x 255 x 23.9
Graphics Processor : NVIDIA GeForce RTX 3070
AVAILABLE ₹ 129,990BUY NOWBUY ON EMI ₹ 21,665/MONTHGET EMI*0% Interest*0 Down Payment*No Processing Fee',

'If you're looking for a powerful gaming laptop that is also portable then MSI Stealth 15M is the one for you. It strikes a great balance between form factor and performance thanks to the 11th Gen Core i7 processor, RTX 3060 GPU, 16GB RAM, and 1TB SSD. On top of that, the high-end gaming laptop looks very sleek.
SPECIFICATIONOS : Windows 10
Display : 15.6" (1920 x 1080)
Processor : Intel Core i7 11th Gen - 11375H | NAM
Memory : 1 TB SSD/16 GBGB DDR4
Weight : 1.7D
Dimension : 358.3 x 248 x 16.15
Graphics Processor : NVIDIA GeForce RTX 3060
AVAILABLE ₹ 134,990BUY NOWBUY ON EMI ₹ 22,498/MONTHGET EMI*0% Interest*0 Down Payment*No Processing Fee',

'If you want possibly the best performance possible on a gaming laptop that's not Alienware then ASUS ROG Strix Scar 15 should fit the bill. It's on the list of the best gaming laptops thanks to a superfast Ryzen 9 5900HX processor, an Nvidia RTX 3080 GPU, 32GB RAM, and 2TB SSD. The laptop is a super-charged machine capable of delivering high performance in all modern tasks.
SPECIFICATIONOS : Windows 10
Display : 15.6" (2560 x 1440)
Processor : AMD Ryzen 9 Octa Core - 5900HX | 3.3 GHz
Memory : 2 TB SSD/32 GBGB DDR4
Weight : 2.3D
Dimension : 354 x 259 x 22.6
Graphics Processor : NVIDIA GeForce RTX 3080
AVAILABLE ₹ 268,990BUY NOWOUT OF STOCK ₹ 193,990BUY NOWBUY ON EMI ₹ 32,331/MONTHGET EMI*0% Interest*0 Down Payment*No Processing Fee',

'When the ASUS ROG Strix Scar 15 ended up on our test bench, we immediately knew it was overkill. But you know what? It's a good kind of overkill. ASUS' annual upgrade to the Scar lineup saw some significant changes this year and we like most of them. The Asus ROG Strix Scar 15 comes with up to AMD Ryzen 9 5900HX and Nvidia GeForce RTX 3080. The laptop also features per-key RGB on its opto-mechanical keyboard. The new Scar laptops also have a slightly new design, making them look a little different from the older ones. It's also worth pointing out that the laptop comes with a 15.6-inch 1440p display with a refresh rate of 165Hz. Pros 1440p, 165Hz display is great for gaming. Impressive performance beyond just gaming. On-board speakers are loud and good. Cons Tends to run hot, but doesn't

\'t throttle.No game leveraged 16GB VRAM on the Nvidia GeForce RTX 3080.SPECIFICATIONOS : Windows 10 HomeDisplay : 15.6" (1920 x 1080)Processor : AMD Ryzen™ 9 5900HX | 3.3 GHzMemory : 1 TB SSD/16 GBGB DDR4Weight : 2.30Dimension : 35.4 x 25.9 x 2.26Graphics Processor : NVIDIA® GeForce RTX™ 3070AVAILABLE ₹ 215,990BUY NOWBUY ON EMI ₹ 35,998/MONTHGET EMI *0% Interest*0 Down Payment*No Processing Fee',

'The Asus Zephyrus G14 is a first-of-its-kind gaming laptop, featuring a high-power 8-core CPU in a 14-inch chassis. Powered by the AMD Ryzen 4000 series processors going all the way up to Ryzen 9 4900HS and an Nvidia GeForce RTX 2060, the AMD Zephyrus G14 is a perfect laptop for those kinds of people who like to game and create, but put a priority on doing so using a light-weight machine.ProsImpressive performance for the form-factor. Anime Matrix display is a very well implemented gimmick.Truly one-of-a-kind machine at the moment.ConsHeat makes the keyboard unusable.Uses a mid-range SSD.No Pg Up or Pg Dn keysSPECIFICATIONOS : Windows 10 HomeDisplay : 14" (1920 x 1080)Processor : AMD 3rd Gen Ryzen 9 | 3.3 GHzMemory : 1 TB SSD/16 GBGB DDR4Weight : 1.65Dimension : 32.5 x 22.1 x 1.8Graphics Processor : NVIDIA GeForce RTX 2060AVAILABLE ₹ 164,990BUY NOWOUT OF STOCK ₹ 144,990BUY NOWBUY ON EMI ₹ 24,165/MONTHGET EMI*0% Interest*0 Down Payment*No Processing Fee',

'It is difficult to find a laptop that offers a good mixture of high specifications, good thermal performance, and a decent price tag. HP Omen 16 is probably one of the laptops that offer all these things in a great overall package. The gaming laptop is powered by an Intel Core i7-12700H an 14-core 20-thread processor capable of delivering up to 4.7 GHz of maximum clock speed with Intel Turbo boost technology. The powerful CPU is paired with an Nvidia RTX 3060 GPU with 6GB GDDR6 VRAM, to deliver high performance while gaming. To further take advantage of these two chips, the HP Omen 16 gaming laptop also comes with a 16.1-inch 1080p display with support for up to 144Hz maximum refresh rate so the user can play all the modern gaming titles at a high refresh rate. For memory and storage, the HP Omen 16 comes with 16GB DDR5 memory running in quad-channel mode and 1TB PCIe NVMe M.2 SSD, making the laptop easily capable of handling games and other resource-heavy applications.SPECIFICATIONOS : Windows 11 HomeDisplay : 16.1" (1920 x 1080)Processor : 12th Gen Intel Core i7-12700H | 4.7 GHzMemory : 1 TB SSD/16 GBGB DDR4Weight : 2.32Dimension : 36.92 x 24.8 x 2.3Graphics Processor : NVIDIA GeForce RTX 3060AVAILABLE ₹ 139,990BUY NOWAVAILABLE ₹ 145,999BUY NOWBUY ON EMI ₹ 23,331/MONTHGET EMI*0% Interest*0 Down Payment*No Processing Fee',

'The machine is powered by an Intel Core i7-10875H processor, offering 8 cores and 16 threads. So, you can leave behind all your concerns around the CPU bottlenecking the overall performance during gaming. With an Nvidia GeForce RTX 2070 Max-Q, this laptop can manage pretty much anything game you throw at it and then some more. The star of the show however is the awesome 300Hz refresh rate capable, 1080p IPS panel on this gaming laptop. Yes, you read that correctly, 300Hz, which means you can get silky smooth, brag-worthy 300FPS on e-sports centric games on this machine.SPECIFICATIONOS : Windows 10Display : 15.6" (3840 x 1100)Processor : Intel Core i7 10th Gen 10875H | NAMemory : 512 GB SSD/4 GBGB DDR4Weight : 2.4Dimension : 268.30 x 360.00 x 20.90Graphics Processor : NVIDIA GeForce RTX 2070 Max-QAVAILABLE ₹ 185,000BUY NOWBUY ON EMI ₹ 30,833/MONTHGET EMI*0% Interest*0 Down Payment*No Processing Fee',

'The Acer Aspire 7 gaming laptop is a very capable laptop that has made it to a lot of our recommendation lists. It costs less than Rs 60,000 but it packs a decent set of internals that should be enough to handle your gaming needs. The laptop even managed to run a lot of modern AAA titles without any issues even though it only has a GTX 1650 GPU. The Ryzen 5 5500U processor inside this laptop runs the show flawlessly. It also has a really good battery life, something that often goes missing when it comes to gaming laptops. You can check out our review of the laptop right here.ProsUnderstated designGreat performance with AMD Ryzen 5 5500UExcellent battery lifeGood port selectionConsHighly uncalibrated displayThe speakers could have been betterSPECIFICATIONOS : Windows 10 HomeDisplay : 15.6" (1920 x 1080)Processor : AMD Ryzen™ 5-5500U hexa-core | NAMemory : 512 GB SSD/8 GBGB DDR4Weight : 2.15Dimension : 2.29 x 36.3 x 25.4Graphics Processor : NVIDIA® GeForce® GTX 1650OUT OF STOCK ₹ 53,490BUY NOWBUY ON EMI ₹ 8,915/MONTHGET EMI*0% Interest*0 Down Payment*No Processing Fee']

In [21]:

```
pri=driver.find_elements_by_xpath("//td[@class='smprice']")
```

```
len(pri)
```

```
C:\Users\raju4\AppData\Local\Temp/ipykernel_9284/4110193034.py:1: DeprecationWarning: fi
nd_elements_by_xpath is deprecated. Please use find_elements(by=By.XPATH, value=xpath) i
nstead
```

```
pri=driver.find_elements_by_xpath("//td[@class='smprice']")
```

```
Out[21]: 10
```

```
In [22]: for i in pri:
```

```
    Price.append(str(i.text).replace("\n", ""))
Price
```

```
Out[22]: ['₹ 429,940',
'₹ 285,390',
'₹ 129,990',
'₹ 134,990',
'₹ 193,990',
'₹ 215,990',
'₹ 144,990',
'₹ 139,990',
'₹ 185,000',
'₹ 53,490']
```

```
In [23]: digit_lap=pd.DataFrame([])
digit_lap['Brands']=Brands[0:10]
digit_lap['Price']=Price[0:10]
digit_lap['Specification']=Specification[0:10]
digit_lap['Description']=Products_Description[0:10]
digit_lap
```

	Brands	Price	Specification	Description
0	1.MSI RAIDER GE76	₹ 429,940	OSWINDOWS 11 HOMEDIPLAY17" (3840 X 2160)PROCESSOR INTEL CORE I7-10875H RAM 16GB NVME SSD 512GB	Possibly the most high-end gaming laptop anyon...
1	2.ASUS ROG STRIX SCAR 15	₹ 285,390	OSWINDOWS 11 HOMEDIPLAY15.6" (2560 X 1440)PROCESSOR INTEL CORE I7-10875H RAM 16GB NVME SSD 512GB	The second high-end gaming laptop on the list ...
2	3.ACER NITRO 5	₹ 129,990	OSWINDOWS 10DISPLAY15.6" (1920 X 1080)PROCESSOR INTEL CORE I7-10750H RAM 8GB NVME SSD 512GB	Possibly the best value-for-money gaming laptop...
3	4.MSI STEALTH 15M	₹ 134,990	OSWINDOWS 10DISPLAY15.6" (1920 X 1080)PROCESSOR INTEL CORE I7-10750H RAM 8GB NVME SSD 512GB	If you're looking for a powerful gaming laptop...
4	5.ASUS ROG STRIX SCAR 15	₹ 193,990	OSWINDOWS 10DISPLAY15.6" (2560 X 1440)PROCESSOR INTEL CORE I7-10875H RAM 16GB NVME SSD 512GB	If you want possibly the best performance poss...
5	6.ASUS ROG STRIX SCAR 15	₹ 215,990	OSWINDOWS 10 HOMEDIPLAY15.6" (1920 X 1080)PROCESSOR INTEL CORE I7-10750H RAM 16GB NVME SSD 512GB	When the ASUS ROG Strix Scar 15 ended up on ou...
6	7.ASUS ZEPHYRUS G14	₹ 144,990	OSWINDOWS 10 HOMEDIPLAY14" (1920 X 1080)PROCESSOR INTEL CORE I7-10750H RAM 16GB NVME SSD 512GB	The Asus Zephyrus G14 is a first-of-its-kind g...
7	8.HP OMEN 16	₹ 139,990	OSWINDOWS 11 HOMEDIPLAY16.1" (1920 X 1080)PROCESSOR INTEL CORE I7-10750H RAM 16GB NVME SSD 512GB	It is difficult to find a laptop that offers a...
8	9.ASUS ROG ZEPHYRUS DUO 15	₹ 185,000	OSWINDOWS 10DISPLAY15.6" (3840 X 1100)PROCESSOR INTEL CORE I7-10875H RAM 16GB NVME SSD 512GB	The machine is powered by an Intel Core i7-108...

	Brands	Price	Specification	Description
9	10.ACER ASPIRE 7 GAMING LAPTOP	₹ 53,490	OSWINDOWS 10 HOMEDIPLAY15.6" (1920 X 1080)PRO...	The Acer Aspire 7 gaming laptop is a very capa...

In []:

5. Write a program to scrap geospatial coordinates (latitude, longitude) of a city searched on google maps.

In [45]:

```
driver = webdriver.Chrome(r"C:\Users\raju4\AppData\Local\Temp\Rar$EXa8584.2049\chromedriver.exe")
```

C:\Users\raju4\AppData\Local\Temp/ipykernel_9284/3140744241.py:1: DeprecationWarning: executable_path has been deprecated, please pass in a Service object
 driver = webdriver.Chrome(r"C:\Users\raju4\AppData\Local\Temp\Rar\$EXa8584.2049\chromedriver.exe")

In [46]:

```
# opening google maps
driver.get("https://www.google.co.in/maps")
time.sleep(3)

city = input('Enter City Name : ')
# Enter city
search = driver.find_element_by_id("searchboxinput")
# Locating s
search.clear()
# clearing s
time.sleep(2)
# entering v
search.send_keys(city)
# Locating s
button = driver.find_element_by_id("searchbox-searchbutton")
# clicking s
button.click()
time.sleep(3)

try:
    url_string = driver.current_url
    print("URL Extracted: ", url_string)
    lat_lng = re.findall(r'@(.*)data',url_string)
    if len(lat_lng):
        lat_lng_list = lat_lng[0].split(",")
        if len(lat_lng_list)>=2:
            lat = lat_lng_list[0]
            lng = lat_lng_list[1]
            print("Latitude = {}, Longitude = {}".format(lat, lng))

except Exception as e:
    print("Error: ", str(e))
```

Enter City Name : noida

C:\Users\raju4\AppData\Local\Temp/ipykernel_9284/4253564315.py:6: DeprecationWarning: find_element_by_* commands are deprecated. Please use find_element() instead
 search = driver.find_element_by_id("searchboxinput") # locating search bar
C:\Users\raju4\AppData\Local\Temp/ipykernel_9284/4253564315.py:10: DeprecationWarning: find_element_by_* commands are deprecated. Please use find_element() instead

```
button = driver.find_element_by_id("searchbox-searchbutton") # locating
search button
URL Extracted: https://www.google.co.in/maps/place/Noida,+Uttar+Pradesh/@28.6130176,77.
2308992,12z/data=!4m5!3m4!1s0x390ce5a43173357b:0x37ffce30c87cc03f!8m2!3d28.5355161!4d77.
3910265
Latitude = 28.6130176, Longitude = 77.2308992
```

4. Write a python program to search for a smartphone(e.g.: OnePlus Nord, pixel 4A, etc.) on www.flipkart.com and scrape following details for all the search results displayed on 1st page.

In []:

```
In [59]: driver = webdriver.Chrome(r"C:\Users\raju4\AppData\Local\Temp\Rar$EXa8584.2049\chromedriver.exe")
url="https://www.flipkart.com/search?q=smartphone&otracker=search&otracker1=search&mark
driver.get(url)
```

```
C:\Users\raju4\AppData\Local\Temp/ipykernel_9284/522274927.py:1: DeprecationWarning: executable_path has been deprecated, please pass in a Service object
    driver = webdriver.Chrome(r"C:\Users\raju4\AppData\Local\Temp\Rar$EXa8584.2049\chromedriver.exe")
```

In [49]:

```
Brand_Name=[]
Colour=[]
Storage_RAM_ROM=[]
P_F_Camera=[]
Display_size_Resolution=[]
ProcessorAndCores=[]
Battery=[]
Price=[]
Product_URL=[]
```

In [50]:

```
#scraping the Brand_Name
BName=driver.find_elements_by_xpath("//div[@class='_4rR01T']")
for i in BName:
    if i.text is None :
        Brand_Name.append("--")
    else:
        Brand_Name.append(i.text)
print(len(Brand_Name),Brand_Name)
```

```
C:\Users\raju4\AppData\Local\Temp/ipykernel_9284/3595618862.py:2: DeprecationWarning: find_elements_by_xpath is deprecated. Please use find_elements(by=By.XPATH, value=xpath) instead
    BName=driver.find_elements_by_xpath("//div[@class='_4rR01T']")
24 ['realme C31 (Dark Green, 32 GB)', 'realme C31 (Dark Green, 64 GB)', 'realme C31 (Light Silver, 32 GB)', 'I Kall Z5 (Pink, 16 GB)', 'realme C31 (Light Silver, 64 GB)', 'POCO C31 (Royal Blue, 64 GB)', 'POCO C31 (Royal Blue, 32 GB)', 'I Kall Z7 Ultra Series (Grey, 32 GB)', 'realme C11 2021 (Cool Grey, 32 GB)', 'realme C35 (Glowing Green, 64 GB)', 'rea
```

```
lme C35 (Glowing Black, 64 GB)', 'I Kall Z7 (Grey, 32 GB)', 'MOTOROLA G60 (Moonless, 128 GB)', 'POCO C31 (Shadow Gray, 64 GB)', 'MOTOROLA G60 (Dynamic Gray, 128 GB)', 'I Kall Z3 Pro (Purple, 32 GB)', 'realme C11 2021 (Cool Blue, 32 GB)', 'realme C11 2021 (Cool Grey, 64 GB)', 'realme C11 2021 (Cool Blue, 64 GB)', 'I Kall Z1 Pro (Sky Blue, 32 GB)', 'REDMI 9i Sport (Coral Green, 64 GB)', 'POCO C31 (Shadow Gray, 32 GB)', 'REDMI Note 10S (Deep Sea Blue, 64 GB)', 'I Kall Z1 Premium (Grey, 32 GB)']
```

In [51]:

```
#scraping the Storage_RAM_ROM
ram=driver.find_elements_by_xpath("//ul[@class='_1xgFaf']//li[1]")
for i in ram:
    if i.text is None :
        Storage_RAM_ROM.append("--")
    else:
        Storage_RAM_ROM.append(i.text)
print(len(Storage_RAM_ROM),Storage_RAM_ROM)
```

```
C:\Users\raju4\AppData\Local\Temp\ipykernel_9284/3717357924.py:2: DeprecationWarning: find_elements_by_xpath is deprecated. Please use find_elements(by=By.XPATH, value>xpath) instead
    ram=driver.find_elements_by_xpath("//ul[@class='_1xgFaf']//li[1]")
24 ['3 GB RAM | 32 GB ROM | Expandable Upto 1 TB', '4 GB RAM | 64 GB ROM | Expandable Up to 1 TB', '3 GB RAM | 32 GB ROM | Expandable Upto 1 TB', '3 GB RAM | 16 GB ROM', '4 GB RAM | 64 GB ROM | Expandable Upto 1 TB', '4 GB RAM | 64 GB ROM | Expandable Upto 512 GB', '3 GB RAM | 32 GB ROM | Expandable Upto 512 GB', '4 GB RAM | 32 GB ROM | Expandable Upto 128 GB', '2 GB RAM | 32 GB ROM | Expandable Upto 256 GB', '4 GB RAM | 64 GB ROM | Expandable Upto 1 TB', '4 GB RAM | 64 GB ROM | Expandable Upto 1 TB', '4 GB RAM | 32 GB ROM | Expandable Upto 128 GB', '6 GB RAM | 128 GB ROM', '4 GB RAM | 64 GB ROM | Expandable Upto 512 GB', '6 GB RAM | 128 GB ROM', '4 GB RAM | 32 GB ROM', '2 GB RAM | 32 GB ROM | Expandable Upto 256 GB', '4 GB RAM | 64 GB ROM | Expandable Upto 256 GB', '4 GB RAM | 64 GB ROM | Expandable Upto 512 GB', '3 GB RAM | 32 GB ROM | Expandable Upto 512 GB', '6 GB RAM | 64 GB ROM | Expandable Upto 512 GB', '4 GB RAM | 32 GB ROM']
```

In [52]:

```
#scraping the P_F_Camera
PC=driver.find_elements_by_xpath("//ul[@class='_1xgFaf']//li[3]")
for i in PC:
    if i.text is None :
        P_F_Camera.append("--")
    else:
        P_F_Camera.append(i.text)
print(len(P_F_Camera),P_F_Camera)
```

```
C:\Users\raju4\AppData\Local\Temp\ipykernel_9284/1686327973.py:2: DeprecationWarning: find_elements_by_xpath is deprecated. Please use find_elements(by=By.XPATH, value>xpath) instead
    PC=driver.find_elements_by_xpath("//ul[@class='_1xgFaf']//li[3]")
24 ['13MP + 2MP + 0.3MP | 5MP Front Camera', '13MP + 2MP + 0.3MP | 5MP Front Camera', '13MP + 2MP + 0.3MP | 5MP Front Camera', '8MP Rear Camera | 5MP Front Camera', '13MP + 2MP + 0.3MP | 5MP Front Camera', '13MP + 2MP + 2MP | 5MP Front Camera', '13MP + 2MP + 2MP | 5MP Front Camera', '13MP Rear Camera | 8MP Front Camera', '8MP Rear Camera | 5MP Front Camera', '50MP + 2MP + 0.3MP | 8MP Front Camera', '50MP + 2MP + 0.3MP | 8MP Front Camera', '13MP Rear Camera | 8MP Front Camera', '108MP + 8MP + 2MP | 32MP Front Camera', '13MP + 2MP + 2MP | 5MP Front Camera', '108MP + 8MP + 2MP | 32MP Front Camera', '8MP Rear Camera | 5MP Front Camera', '8MP Rear Camera | 5MP Front Camera', '8MP Rear Camera | 5MP Front Camera', '13MP Rear Camera | 5MP Front Camera', '13MP + 2MP + 2MP | 5MP Front Camera', '64MP + 8MP + 2MP + 2MP | 13MP Front Camera', '8MP Rear Camera | 5MP Front Camera']
```

```
In [53]: #scraping the Display_size_Resolution
DS=driver.find_elements_by_xpath("//ul[@class='_1xgFaf']//li[2]")
for i in DS:
    if i.text is None :
        Display_size_Resolution.append("--")
    else:
        Display_size_Resolution.append(i.text)
print(len(Display_size_Resolution),Display_size_Resolution)
```

C:\Users\raju4\AppData\Local\Temp\ipykernel_9284/2000472629.py:2: DeprecationWarning: find_elements_by_xpath is deprecated. Please use find_elements(by=By.XPATH, value>xpath) instead

```
DS=driver.find_elements_by_xpath("//ul[@class='_1xgFaf']//li[2]")
24 ['16.56 cm (6.52 inch) HD Display', '16.56 cm (6.52 inch) HD Display', '16.56 cm (6.52 inch) HD Display', '13.84 cm (5.45 inch) Display', '16.56 cm (6.52 inch) HD Display', '16.59 cm (6.53 inch) HD+ Display', '16.59 cm (6.53 inch) HD+ Display', '15.9 cm (6.26 inch) Display', '16.51 cm (6.5 inch) HD+ Display', '16.76 cm (6.6 inch) Full HD+ Display', '16.76 cm (6.6 inch) Full HD+ Display', '15.9 cm (6.26 inch) HD Display', '17.22 cm (6.78 inch) Full HD+ Display', '16.59 cm (6.53 inch) HD+ Display', '17.27 cm (6.8 inch) Full HD+ Display', '15.24 cm (6 inch) Display', '16.51 cm (6.5 inch) HD+ Display', '16.51 cm (6.5 inch) HD+ Display', '16.51 cm (6.5 inch) HD+ Display', '13.84 cm (5.45 inch) Display', '16.59 cm (6.53 inch) HD+ Display', '16.59 cm (6.53 inch) HD+ Display', '16.33 cm (6.43 inch) Full HD+ Super AMOLED Display', '13.84 cm (5.45 inch) Display']
```

```
In [54]: #scraping the ProcessorAndCores
P=driver.find_elements_by_xpath("//ul[@class='_1xgFaf']//li[5]")
for i in P:
    if i.text is None :
        ProcessorAndCores.append("--")
    else:
        ProcessorAndCores.append(i.text)
print(len(ProcessorAndCores),ProcessorAndCores)
```

C:\Users\raju4\AppData\Local\Temp\ipykernel_9284/2449918099.py:2: DeprecationWarning: find_elements_by_xpath is deprecated. Please use find_elements(by=By.XPATH, value>xpath) instead

```
P=driver.find_elements_by_xpath("//ul[@class='_1xgFaf']//li[5]")
24 ['Unisoc T612 Processor', 'Unisoc T612 Processor', 'Unisoc T612 Processor', '1 year manufacturing warranty for mobile and 6 months for box accessories', 'Unisoc T612 Processor', 'MediaTek Helio G35 Processor', 'MediaTek Helio G35 Processor', '1 year manufacturing warranty for mobile and 6 months for box accessories', 'Octa-core Processor', 'Unisoc Tiger T616 Processor', 'Unisoc Tiger T616 Processor', 'Quad Core Processor', 'Qualcomm Snapdragon 732G Processor', 'MediaTek Helio G35 Processor', 'Qualcomm Snapdragon 732G Processor', '12 Months on Smartphone and 6 Months On Accessories', 'Octa-core Processor', 'Octa-core Processor', 'Octa-core Processor', '1 year manufacturing warranty for mobile and 6 months for box accessories', 'MediaTek Helio G25 Processor', 'MediaTek Helio G35 Processor', 'Mediatek Helio G95 Processor', '1 year manufacturing warranty for mobile and 6 months for box accessories']
```

```
In [55]: #scraping the Battery
B=driver.find_elements_by_xpath("//ul[@class='_1xgFaf']//li[4]")
for i in B:
    if i.text is None :
        Battery.append("--")
    else:
        Battery.append(i.text)
print(len(Battery),Battery)
```

```
C:\Users\raju4\AppData\Local\Temp/ipykernel_9284/3928553827.py:2: DeprecationWarning: fi
nd_elements_by_xpath is deprecated. Please use find_elements(by=By.XPATH, value=xpath) i
nstead
    B=driver.find_elements_by_xpath("//ul[@class=' _1xgFaf']//li[4]")
24 ['5000 mAh Battery', '5000 mAh Battery', '5000 mAh Battery', '3000 mAh Battery', '500
0 mAh Battery', '5000 mAh Lithium-ion Polymer Battery', '5000 mAh Lithium-ion Polymer Ba
ttery', '4000 mAh Battery', '5000 mAh Battery', '5000 mAh Lithium Polymer Battery', '500
0 mAh Lithium Polymer Battery', '4000 mAh Battery', '6000 mAh Battery', '5000 mAh Lithiu
m-ion Polymer Battery', '6000 mAh Battery', '4000 mAh Battery', '5000 mAh Battery', '500
0 mAh Battery', '5000 mAh Battery', '3000 mAh Battery', '5000 mAh Li-Polymer Battery',
'5000 mAh Lithium-ion Polymer Battery', '5000 mAh Lithium-Ploymer Battery', '3000 mAh Ba
ttery']
```

In [56]:

```
#scraping the Price
price=driver.find_elements_by_xpath("//div[@class='_30jeq3 _1_WHN1']")
for i in price:
    if i.text is None :
        Price.append("--")
    else:
        Price.append(i.text)
print(len(Price),Price)
```

```
C:\Users\raju4\AppData\Local\Temp/ipykernel_9284/3555505901.py:2: DeprecationWarning: fi
nd_elements_by_xpath is deprecated. Please use find_elements(by=By.XPATH, value=xpath) i
nstead
```

```
    price=driver.find_elements_by_xpath("//div[@class='_30jeq3 _1_WHN1']")
24 ['₹9,299', '₹9,999', '₹9,299', '₹4,799', '₹9,999', '₹8,499', '₹7,499', '₹6,399', '₹7,
499', '₹11,999', '₹11,999', '₹6,499', '₹14,999', '₹8,499', '₹14,999', '₹5,799', '₹7,49
9', '₹8,999', '₹8,999', '₹5,299', '₹8,799', '₹7,499', '₹12,999', '₹5,299']
```

In [57]:

```
FlipKart=pd.DataFrame([])
FlipKart['Brand_Name']=Brand_Name
FlipKart['Storage_RAM_ROM']=Storage_RAM_ROM
FlipKart['Amount_P_F_Camera']=P_F_Camera
FlipKart['Display_size_Resolution']=Display_size_Resolution
FlipKart['ProcessorAndCores']=ProcessorAndCores
FlipKart['Battery']=Battery
FlipKart['Price']=Price
```

FlipKart

Out[57]:

	Brand_Name	Storage_RAM_ROM	Amount_P_F_Camera	Display_size_Resolution	ProcessorAndCores	Battery
0	realme C31 (Dark Green, 32 GB)	3 GB RAM 32 GB ROM Expandable Upto 1 TB	13MP + 2MP + 0.3MP 5MP Front Camera	16.56 cm (6.52 inch) HD Display	Unisoc T612 Processor	5000 mAh Battery
1	realme C31 (Dark Green, 64 GB)	4 GB RAM 64 GB ROM Expandable Upto 1 TB	13MP + 2MP + 0.3MP 5MP Front Camera	16.56 cm (6.52 inch) HD Display	Unisoc T612 Processor	5000 mAh Battery

	Brand_Name	Storage_RAM_ROM	Amount_P_F_Camera	Display_size_Resolution	ProcessorAndCores	Battery
2	realme C31 (Light Silver, 32 GB)	3 GB RAM 32 GB ROM Expandable Upto 1 TB	13MP + 2MP + 0.3MP 5MP Front Camera	16.56 cm (6.52 inch) HD Display	Unisoc T612 Processor	5000 mAh Battery
3	I Kall Z5 (Pink, 16 GB)	3 GB RAM 16 GB ROM	8MP Rear Camera 5MP Front Camera	13.84 cm (5.45 inch) Display	1 year manufacturing warranty for mobile and 6...	3000 mAh Battery
4	realme C31 (Light Silver, 64 GB)	4 GB RAM 64 GB ROM Expandable Upto 1 TB	13MP + 2MP + 0.3MP 5MP Front Camera	16.56 cm (6.52 inch) HD Display	Unisoc T612 Processor	5000 mAh Battery
5	POCO C31 (Royal Blue, 64 GB)	4 GB RAM 64 GB ROM Expandable Upto 512 GB	13MP + 2MP + 2MP 5MP Front Camera	16.59 cm (6.53 inch) HD+ Display	MediaTek Helio G35 Processor	Lithium- ion Polymer Battery
6	POCO C31 (Royal Blue, 32 GB)	3 GB RAM 32 GB ROM Expandable Upto 512 GB	13MP + 2MP + 2MP 5MP Front Camera	16.59 cm (6.53 inch) HD+ Display	MediaTek Helio G35 Processor	Lithium- ion Polymer Battery
7	I Kall Z7 Ultra Series (Grey, 32 GB)	4 GB RAM 32 GB ROM Expandable Upto 128 GB	13MP Rear Camera 8MP Front Camera	15.9 cm (6.26 inch) Display	1 year manufacturing warranty for mobile and 6...	4000 mAh Battery
8	realme C11 2021 (Cool Grey, 32 GB)	2 GB RAM 32 GB ROM Expandable Upto 256 GB	8MP Rear Camera 5MP Front Camera	16.51 cm (6.5 inch) HD+ Display	Octa-core Processor	5000 mAh Battery
9	realme C35 (Glowing Green, 64 GB)	4 GB RAM 64 GB ROM Expandable Upto 1 TB	50MP + 2MP + 0.3MP 8MP Front Camera	16.76 cm (6.6 inch) Full HD+ Display	Unisoc Tiger T616 Processor	5000 mAh Lithium Polymer Battery
10	realme C35 (Glowing Black, 64 GB)	4 GB RAM 64 GB ROM Expandable Upto 1 TB	50MP + 2MP + 0.3MP 8MP Front Camera	16.76 cm (6.6 inch) Full HD+ Display	Unisoc Tiger T616 Processor	5000 mAh Lithium Polymer Battery
11	I Kall Z7 (Grey, 32 GB)	4 GB RAM 32 GB ROM Expandable Upto 128 GB	13MP Rear Camera 8MP Front Camera	15.9 cm (6.26 inch) HD Display	Quad Core Processor	4000 mAh Battery

	Brand_Name	Storage_RAM_ROM	Amount_P_F_Camera	Display_size_Resolution	ProcessorAndCores	Battery
12	MOTOROLA G60 (Moonless, 128 GB)	6 GB RAM 128 GB ROM	108MP + 8MP + 2MP 32MP Front Camera	17.22 cm (6.78 inch) Full HD+ Display	Qualcomm Snapdragon 732G Processor	6000 mAh Battery
13	POCO C31 (Shadow Gray, 64 GB)	4 GB RAM 64 GB ROM Expandable Upto 512 GB	13MP + 2MP + 2MP 5MP Front Camera	16.59 cm (6.53 inch) HD+ Display	MediaTek Helio G35 Processor	Lithium-ion Polymer Battery 5000 mAh
14	MOTOROLA G60 (Dynamic Gray, 128 GB)	6 GB RAM 128 GB ROM	108MP + 8MP + 2MP 32MP Front Camera	17.27 cm (6.8 inch) Full HD+ Display	Qualcomm Snapdragon 732G Processor	6000 mAh Battery
15	I Kall Z3 PRO (Purple, 32 GB)	4 GB RAM 32 GB ROM	8MP Rear Camera 5MP Front Camera	15.24 cm (6 inch) Display	12 Months on Smartphone and 6 Months On Access...	4000 mAh Battery
16	realme C11 2021 (Cool Blue, 32 GB)	2 GB RAM 32 GB ROM Expandable Upto 256 GB	8MP Rear Camera 5MP Front Camera	16.51 cm (6.5 inch) HD+ Display	Octa-core Processor	5000 mAh Battery
17	realme C11 2021 (Cool Grey, 64 GB)	4 GB RAM 64 GB ROM Expandable Upto 256 GB	8MP Rear Camera 5MP Front Camera	16.51 cm (6.5 inch) HD+ Display	Octa-core Processor	5000 mAh Battery
18	realme C11 2021 (Cool Blue, 64 GB)	4 GB RAM 64 GB ROM Expandable Upto 256 GB	8MP Rear Camera 5MP Front Camera	16.51 cm (6.5 inch) HD+ Display	Octa-core Processor	5000 mAh Battery
19	I Kall Z1 Pro (Sky Blue, 32 GB)	4 GB RAM 32 GB ROM	8MP Rear Camera 5MP Front Camera	13.84 cm (5.45 inch) Display	1 year manufacturing warranty for mobile and 6...	3000 mAh Battery
20	REDMI 9i Sport (Coral Green, 64 GB)	4 GB RAM 64 GB ROM Expandable Upto 512 GB	13MP Rear Camera 5MP Front Camera	16.59 cm (6.53 inch) HD+ Display	MediaTek Helio G25 Processor	5000 mAh Li-Polymer Battery
21	POCO C31 (Shadow Gray, 32 GB)	3 GB RAM 32 GB ROM Expandable Upto 512 GB	13MP + 2MP + 2MP 5MP Front Camera	16.59 cm (6.53 inch) HD+ Display	MediaTek Helio G35 Processor	Lithium-ion Polymer Battery 5000 mAh

	Brand_Name	Storage_RAM_ROM	Amount_P_F_Camera	Display_size_Resolution	ProcessorAndCores	Battery
22	REDMI Note 10S (Deep Sea Blue, 64 GB)	6 GB RAM 64 GB ROM Expandable upto 512 GB	64MP + 8MP + 2MP + 2MP 13MP Front Camera	16.33 cm (6.43 inch) Full HD+ Super AMOLED Display	Mediatek Helio G95 Processor	5000 mAh Lithium-Polymer Battery
23	I Kall Z1 Premium (Grey, 32 GB)	4 GB RAM 32 GB ROM	8MP Rear Camera 5MP Front Camera	13.84 cm (5.45 inch) Display	1 year manufacturing warranty for mobile and 6...	3000 mAh Battery

In []: