Web scrapping

```
In [1]:
                1 #import BeautifulSoup
                 2 #import request
                 3
                     #parcing = one format to another format
                 4 #preetify = readable
                 5 # we can use beautifulsoup or celinium
                 6 # beautifulsoup = scrapping data from one page and it is one of the librory
                     #labrory = collection of package
                     # bs4 version
 In [2]:
                1 # use = to get huge information from the webside = use
 In [7]:
                1 from bs4 import BeautifulSoup as bs
 In [8]:
                1 import requests
 In [9]: 066au-thin-light-laptop/product-reviews/itmdbb2d234797b6?pid=COMFZHZFZFFBJBHH&lid=LSTCOMFZHZFZFFBJBHH7WNMPE&marketplace=FLIPKART
                 1 | r=requests.get(url) # request module in that get method
In [10]:
                 2 print(r)
                                                       # we need responce like 200 or it might be 400
               <Response [200]>
 In [8]:
                1 htmlcontent=r.content
                 2 print(htmlcontent)
              tailier >\tuiv>\uiv>\tuiv \tass= _ixiijk >\tuiv \tass= _iriijii >\tuiv \tass= _iriiiink >\forall \tass= _ixiiz_ >\tuiv \tass= _i = _ixiiz >\tass= _ixiiz_ >\tuiv \tass= _ixiiz_ >\tass= _ixiiz
               rt-plus_8d85f4.png" alt="Flipkart" title="Flipkart" class="_2xm1JU"/></a><a class="_211jIi" href="/plus">Explore<!-- --> <spa
               n class="_2FVHGh">Plus</span><img width="10" src="//static-assets-web.flixcart.com/fk-p-linchpin-web/fk-cp-zion/img/plus_aef8
               61.png"/></a></div></div></div><div class="_1cmsER"><form class="_2M8cLY header-form-search" action="/search" method="GET"><div cla
              ss="col-12-12 20090E"><div class="_3005Xc"><input type="text" value="" class="_3704LK" title="Search for products, brands and more" name="q" autoComplete="off" placeholder="Search for products, brands and more"/></div><br/>bmit"><svg width="20" height="20" viewBox="0 0 17 18" class="" xmlns="http://www.w3.org/2000/svg"><g fill="#2874F1" fill-rule"
               ="evenodd"><path class="_34RNph" d="m11.618 9.89714.225 4.212c.092.092.101.232.02.3131-1.465 1.46c-.081.081-.221.072-.314-.02
               1-4.216-4.203"></path><path class="_34RNph" d="m6.486 10.901c-2.42 0-4.381-1.956-4.381-4.368 0-2.413 1.961-4.369 4.381-4.369
               2.42 0 4.381 1.956 4.381 4.369 0 2.413-1.961 4.368-4.381 4.368m0-10.835c-3.582 0-6.486 2.895-6.486 6.467 0 3.572 2.904 6.467
               6.486 6.467 3.582 0 6.486-2.895 6.486-6.467 0-3.572-2.904-6.467-6.486-6.467"></path></g></svg></button><input type="hidden" n
               ame="otracker" value="search"/><input type="hidden" name="otracker1" value="search"/><input type="hidden" name="marketplace"
               value="FLIPKART"/><input type="hidden" name="as-show" value="off"/><input type="hidden" name="as" value="off"/></div>clas
               s="col-12-12 _1MRYA1"></form></div><div class="go_DOp _2errNR"><div class="_28p97w"><div class="_1psGvi _3BvnxG"><div><a
               class=" 1 3w1N" href="/account/login?ret=/hp-15s-ryzen-3-dual-core-3250u-4-gb-1-tb-hdd-windows-10-home-15s-gr0006au-thin-ligh
               t-laptop/product-reviews/itmdbb2d234797b6%3Fpid%3DCOMFZHZFZFFBJBHH%26lid%3DLSTCOMFZHZFZFFBJBHH7WNMPE%26marketplace%3DFLIPKAR
               T">Login</a></div></div></div></div></div></div></div></div
               e&utm medium=websitedirect" class=" 3-PJz-"><span>Become a Seller</span></a></div><div class="go DOp"><div class=" 28p97
              w"><div class="_lpsGvi _3BvnxG"><div><div class="exehdJ"> <!-- ->More<!-- --> </div></div></svg width="4.7" height="8"
In [12]: 1 soup=bs(htmlcontent, "html.parser") #parser = to get whole content and preetyfy it for furthur
               NameError
                                                                                 Traceback (most recent call last)
               ~\AppData\Local\Temp/ipykernel_2728/1339617220.py in <module>
               ----> 1 soup=bs(htmlcontent,"html.parser")
                                                                                     #parser = to get whole content and preetyfy it for furthur
               NameError: name 'htmlcontent' is not defined
In [11]: 1 print(soup.prettify)
               NameError
                                                                                  Traceback (most recent call last)
               ~\AppData\Local\Temp/ipykernel_2728/1128155920.py in <module>
               ---> 1 print(soup.prettify)
               NameError: name 'soup' is not defined
```

```
In [11]:
        1 # to find title of the product
         3 title=soup.title
         4 print(title)
         5 print(type(title))
        <ti><ti>title>Hp 15s Ryzen 3 Dual Core 3250u 4 Gb 1 Tb Hdd Windows 10 Home 15s Gr0006au Thin Light Laptop Reviews: Latest Review of Hp
        15s Ryzen 3 Dual Core 3250u 4 Gb 1 Tb Hdd Windows 10 Home 15s Gr0006au Thin Light Laptop | Price in India | Flipkart.com</title
        <class 'bs4.element.Tag'>
In [12]: 1 print(title.string)
        Hp 15s Ryzen 3 Dual Core 3250u 4 Gb 1 Tb Hdd Windows 10 Home 15s Gr0006au Thin Light Laptop Reviews: Latest Review of Hp 15s Ry
        zen 3 Dual Core 3250u 4 Gb 1 Tb Hdd Windows 10 Home 15s Gr0006au Thin Light Laptop | Price in India | Flipkart.com
In [15]:
         price=soup.find all("div",class =" 30jeq3")
         2 print(price)
        [<div class="_30jeq3">₹32,990</div>]
In [16]: 1 print(price[0].string)
        ₹32,990
In [18]:
        1 prod_price=[]
         2 for i in range(0,len(price)):
              prod_price.append(price[i].get_text())
         4 print(prod_price)
        ['₹32,990']
In [19]:
        1 cust_name=soup.find_all("p",class_="_2sc7ZR _2V5EHH")
         2 print(cust_name)
        [Vaibhav Bharati, MD MATHIN ALI, Sayan
        i Banerjee , Satyajit Swain, Vijay Singh Shekhawat, <p clas
        s="_2sc7ZR _2V5EHH">Anoop Mathew, Vivek Raturi, Anoop Mathew
        , Flipkart Customer, Shivani Pankaj]
In [20]: 1 | name=[]
         2 for i in range(0,len(cust_name)):
              name.append(cust_name[i].get_text())
         3
         4 print(name)
       ['Vaibhav Bharati', 'MD MATHIN ALI', 'Sayani Banerjee', 'Satyajit Swain', 'Vijay Singh Shekhawat', 'Anoop Mathew', 'Vivek Raturi', 'Anand Amirtharaj', 'Flipkart Customer', 'Shivani Pankaj']
In [21]: 1 | comment=soup.find_all("p",class_="_2-N8zT")
         2 print(comment)
        [Very Good, Terrific, Worth every penny, 
       T">Fair, Fair, Just wow!, Good, Won derful, Very Good, Nice product]
In [22]:
         1 comment_name=[]
         2 | for i in range(0,len(comment)):
               comment_name.append(comment[i].get_text())
         4 print(comment_name)
        ['Very Good', 'Terrific', 'Worth every penny', 'Fair', 'Just wow!', 'Good', 'Wonderful', 'Very Good', 'Nice product']
In [23]: 1 comment_name
Out[23]: ['Very Good',
         'Terrific'
         'Worth every penny',
         'Fair',
         'Fair',
         'Just wow!',
         'Good',
         'Wonderful'
         'Very Good'
         'Nice product']
```

check how much stars gives customer to this product

[<div class="_3LWZ1K">3.8</div>, <div class="_3LWZlK _1BLPMq">4<im g class="_1wB990" src=" ĪXMII+PHBĪdGggZmlsbD0iI0ZGRiIgZD0iTTYuNSA5LjQzOWwtMy42NzQgMi4yMy45NC00LjI2LTMuMjEtMi44ODMgNC4yNTQtLjQwNEw2LjUuMTEybDEuNjkgNC4wM SAØLjIINC40MDQTMy4yMSAyLjg4Mi45NCAØLjI2eiIvPjwvc3ZnPg=="/></div>, <div class="_3LWZIK _1BLPMq">5<img class="_1wB990" src="data: image/svg+xml;base64,PHN2ZyB4bWxucz@iaHR@cDovL3d3dy53My5vcmcvMjAwMC9zdmciIHdpZHRoPSIxMyIgaGVpZ2h@PSIxMiI+PHBhdGggZmlsbD@iI@ZGRi IgZD0iTTYuNSA5LjQzOWwtMy42NzQgMi4yMy45NC00LjI2LTMuMjEtMi40DMgNC4yNTQtLjQwMEw2LjUuMTEybDEunjkgNC4wMSA0LjI1NC40MDQtMyMSAyLjgAM
i45NCA0LjI2eiIVPjwvc3ZnPg=="/</div>, <div class="_3LWZlK _1BLPMq">5<img class="_1wB990" src="
4bWxucz0iaHR0cDovL3d3dy53My5vcmcvMjAwMC9zdmciIHdpZHR0PSIxMyIgaGVpZ2h0PSIxMiI+PHBhdGggZmlsbD0iI0ZGRiIgZD0iTTYuNSA5LjQzOWwtMy42Nz QgMi4yMy45NC00LjI2LTMuMjEtMi44ODMgNC4yNTQtLjQwNEw2LjUuMTEybDEuNjkgNC4wMSA0LjI1NC40MDQtMy4yMSAyLjg4Mi45NCA0LjI2eiIvPjwvc3ZnPg= ="/></div>, <div class="_3LWZIK _1BLPMq">3</div>, <div class="_3LW ZIK _1BLPMq">3</div>, <div class="_3LWZlK _1BLPMq">5</div>, <div class="_3LWZlK _1BLPMq">3\img class="_1wB99o" src=" SA5LjQzOWwtMy42NzQgMi4yMy45NC00LjI2LTMuMjEtMi44ODMgNC4yNTQtLjQwNEw2LjUuMTEybDEuNjkgNC4wMSA0LjI1NC40MDQtMy4yMSAyLjg4Mi45NCA0LjI2 eiIvPjwvc3ZnPg=="/></div>, <div class="_3LWZlK _1BLPMq">4</div>, < div class="_3LWZlK _1BLPMq">4</div>, <div class="_3LWZlK _1BLPMq"> 4</div>]

[<div class="t-ZTKy"><div><div class="">Read carefully.. My Experience was complicated just because of boot time i.e. on/off ti me was too long until I didn't go for updates but once I have done all updates... I am telling you guys...Maska..hai.. Maska..< br/>
Superb performance.. and look wise i liked it very much. I use to play GT racing without any lag..

/> My daughte r is also happy for her online studies.

/or/>My suggestion is that don't think twice just go for it with Flipkart.

kor/ work
its just my dream lappi,(laptop)
2)just go for laptop,its really awesome
3)I just bought it for my proj ect and bussiness work it's awesome
br/>4)one of the best product from HP
br/>5)just price is little high ,it have to be reduce d
d>) I loved it
) I recommend it for u, ∰∰♥</div>READ MORE</div></div>, < div class="t-ZTKy"><div><div class="">Nice laptop and Ryzen 3 is a good processor for multi tasking... Design and color both ar e good. It's better to go with this HP laptop in this price segment...</div>READ MORE </div></div>, <div class="t-ZTKy"><div><div class="">This laptop needs to be upgraded to at least 8 gb memory for better perfor mance as most of HP bloatware that comes with the windows build use almost 80% of ram all the time. Besides the built in vega g pu shares Ram as it does not have dedicated graphics memory. An SSD upgrade and booting the OS in there should do wonders to th e disk I/O and overall performance. Out of the box, laptop is sluggish so 3 stars.</di>>READ MORE</ span></div>, <div class="t-ZTKy"><div c p. Dell Laptop is best & friendly for smooth process
br/>& I thing i3 is better comparison to Rayzen 3.</div>READ MORE</div></div>, <div class="t-ZTKy"><div class="">Awesome and nice for students and all. The favorite things is its comes with Windows and office home and student precious.</div><READ MORE</div></div>, <div class="t-ZTKy"><div><div class="">Do not expect much :
1)Very slow takes a lot of time just open a browser.
2)Design is good
3)Battery backup ok.
br/>if you want to do basic editing and some gaming then g o for at least 8 GB ram and 4 core processor .</div>READ MORE</div></div><, <div class ="t-ZTKy"><div><div class="">Compare to i3, ryzen 3 is far better in performance with 4gb ram, full Battery charged still works more than 6 hrs... No heating problem.. Display only not bad quality, rest of them are worth for this amount</div>READ MORE</div></div>, <div class="t-ZTKy"><div><div class="">Very nice product finishing is ver y good.</div>READ MORE</div>, <div class="t-ZTKy"><div>cdiv class="">This lapto p is very light weight and I am happy!! 😀 🥴 </div>READ MORE</div></div>]

Out[31]: ["Read carefully.. My Experience was complicated just because of boot time i.e. on/off time was too long until I didn't go for updates but once I have done all updates... I am telling you guys...Maska..hai.. Maska..Superb performance.. and look wise i li ked it very much. I use to play GT racing without any lag..My daughter is also happy for her online studies.My suggestion is th at don't think twice just go for it with Flipkart.Thanks flipkart for very safe and on time delivery.READ MORE",

"#Price up to markIts wonderful product for those ,who looking for student and domestic work1)Its just my dream lappi,(lapto p)2)just go for laptop,its really awesome3)I just bought it for my project and bussiness work it's awesome4)one of the best product from HP5)just price is little high ,it have to be reduced6) I loved it7) I recommend it for u, FEAD MORE,

"Nice laptop and Ryzen 3 is a good processor for multi tasking... Design and color both are good. It's better to go with this HP laptop in this price segment...READ MORE",

'This laptop needs to be upgraded to at least 8 gb memory for better performance as most of HP bloatware that comes with the w indows build use almost 80% of ram all the time. Besides the built in vega gpu shares Ram as it does not have dedicated graphic s memory. An SSD upgrade and booting the OS in there should do wonders to the disk I/O and overall performance. Out of the box, laptop is sluggish so 3 stars.READ MORE',

'HP Product is Good/Ok, but personally i will prefer Dell Laptop. Dell Laptop is best & friendly for smooth process& I thing i 3 is better comparison to Rayzen 3.READ MORE',

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'Do not expect much :1)Very slow takes a lot of time just open a browser.2)Design is good 3)Battery backup ok.if you want to do basic editing and some gaming then go for atleast 8 GB ram and 4 core processor .READ MORE',

'Compare to i3, ryzen 3 is far better in performance with 4gb ram, full Battery charged still works more than 6 hrs... No heat ing problem.. Display only not bad quality, rest of them are worth for this amountREAD MORE',

'Very nice product finishing is very good.READ MORE',

'This laptop is very light weight and I am happy!! @@READ MORE']

Applying Tabular data structure

```
In [5]: 1 import pandas as pd
```

in pandas data stored in frames

```
In [6]:
         1 df=pd.DataFrame()
         2 df["cust_name"]=name
         3 df["comment"]=comment name
         4 df["stars"]=cust_stars
         5
            df["in_comment"]=review
                                                 Traceback (most recent call last)
        ~\AppData\Local\Temp/ipvkernel 2728/3555515426.pv in <module>
             1 df=pd.DataFrame()
        ---> 2 df["cust_name"]=name
              3 df["comment"]=comment_name
              4 df["stars"]=cust stars
              5 df["in comment"]=review
        NameError: name 'name' is not defined
In [2]: 1 df
                                                  Traceback (most recent call last)
        ~\AppData\Local\Temp/ipykernel_2728/1396537375.py in <module>
        NameError: name 'df' is not defined
In [ ]: 1
```