

```
1 from bs4 import BeautifulSoup as bs
```

```
1 import requests
```

```
1 link = "https://www.flipkart.com/python-programming-using-problem-solving-approach-firs
```

```
1 page=requests.get(link)
```

1 page

Out[14]:

<Response [200]>

1 page.content

```
ing Approach First Edition by Marek Jakiema at Low Price in India | Flipka
rt.com"><meta name="twitter:description" content="Shop for electronics, ap
parels & more using our Flipkart app Free shipping & COD."><meta property
="twitter:image" content="http://rukmini1.flixcart.com/image/300/300/j4irl
ow0/book/1/7/3/python-programming-original-imaevypmqwygthb.jpeg"/><meta n
ame="twitter:app:country" content="in"><meta name="al:ios:app_name" conten
t="Flipkart"><meta name="al:ios:app_store_id" content="742044692"><meta na
me="twitter:app:name:iphone" content="Flipkart"><meta name="twitter:app:i
d:iphone" content="742044692"><meta name="twitter:app:url:iphone" content
="http://dl.flipkart.com/dl/home?"><meta name="twitter:app:name:ipad" cont
ent="Flipkart"><meta name="twitter:app:id:ipad" content="742044692"><meta
name="twitter:app:url:ipad" content="http://dl.flipkart.com/dl/home?"><met
a name="twitter:app:name:googleplay" content="Flipkart"><meta name="twitte
r:app:id:googleplay" content="com.flipkart.android"><meta name="twitter:ap
p:url:googleplay" content="http://dl.flipkart.com/dl/home?"><style>#contai
ner {\n\t\t\ttheight: 100%;\n\t\t\t}/></style><script src="//static-assets-web.
flixcart.com/fk-p-linchpin-web/fk-cp-zion/js/runtime.bf6e0956.js" defer="d
efer" crossorigin="anonymous"></script><script src="//static-assets-web.fl
ixcart.com/fk-p-linchpin-web/fk-cp-zion/js/vendor.chunk.0816c45d.js" defer
="defer" crossorigin="anonymous"></script><script src="//static-assets-we
```

```
1 soup=bs(page.content, "html.parser")
```

In [17]:

1 soup

Out[17]:

```
<!DOCTYPE html>
<html lang="en"><head><link href="https://rukminim1.flixcart.com" rel="pre
connect"/><link href="//static-assets-web.flixcart.com/fk-p-linchpin-web/f
k-cp-zion/css/app_modules.chunk.905c37.css" rel="stylesheet"/><link href
="//static-assets-web.flixcart.com/fk-p-linchpin-web/fk-cp-zion/css/app.ch
unk.104e9a.css" rel="stylesheet"/><meta content="text/html; charset=utf-8"
http-equiv="Content-type"/><meta content="IE=Edge" http-equiv="X-UA-Compat
ible"/><meta content="102988293558" property="fb:page_id"/><meta content
="658873552,624500995,100000233612389" property="fb:admins"/><meta content
="noodp" name="robots"/><link href="https://static-assets-web.flixcart.co
m/www/promos/new/20150528-140547-favicon-retina.ico" rel="shortcut icon"/>
<link href="/osdd.xml?v=2" rel="search" type="application/opensearchdescri
ption+xml"/><meta content="website" property="og:type"/><meta content="Fli
pkart.com" name="og_site_name" property="og:site_name"/><link href="/apple
-touch-icon-57x57.png" rel="apple-touch-icon" sizes="57x57"/><link href="/
apple-touch-icon-72x72.png" rel="apple-touch-icon" sizes="72x72"/><link hr
ef="/apple-touch-icon-114x114.png" rel="apple-touch-icon" sizes="114x114"/
><link href="/apple-touch-icon-144x144.png" rel="apple-touch-icon" sizes
```

In [18]:

1 print(soup.prettify())

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <link href="https://rukminim1.flixcart.com" rel="preconnect"/>
    <link href="//static-assets-web.flixcart.com/fk-p-linchpin-web/fk-cp-zio
n/css/app_modules.chunk.905c37.css" rel="stylesheet"/>
    <link href="//static-assets-web.flixcart.com/fk-p-linchpin-web/fk-cp-zio
n/css/app.chunk.104e9a.css" rel="stylesheet"/>
    <meta content="text/html; charset=utf-8" http-equiv="Content-type"/>
    <meta content="IE=Edge" http-equiv="X-UA-Compatible"/>
    <meta content="102988293558" property="fb:page_id"/>
    <meta content="658873552,624500995,100000233612389" property="fb:admin
s"/>
    <meta content="noodp" name="robots"/>
    <link href="https://static-assets-web.flixcart.com/www/promos/new/201505
28-140547-favicon-retina.ico" rel="shortcut icon"/>
    <link href="/osdd.xml?v=2" rel="search" type="application/opensearchdesc
ription+xml"/>
    <meta content="website" property="og:type"/>
    <meta content="Flipkart.com" name="og:site_name" property="og:site_name">
```

TITLE

In [20]:

```
1 title=soup.title
2 print(soup.title)
```

```
<title>Python Programming - Using Problem Solving Approach First Edition: B
uy Python Programming - Using Problem Solving Approach First Edition by Tha
reja Reema at Low Price in India | Flipkart.com</title>
```

In [21]:

```
1 print(type(soup))
```

```
<class 'bs4.BeautifulSoup'>
```

In [22]:

```
1 print(title.string)
```

```
Python Programming - Using Problem Solving Approach First Edition: Buy Pyth  
on Programming - Using Problem Solving Approach First Edition by Thareja Re  
ema at Low Price in India | Flipkart.com
```

PRICE

In [24]:

```
1 price=soup.find_all("div",class="_30jeq3 _16Jk6d")
```

In [25]:

```
1 print(price)
```

```
[<div class="_30jeq3 _16Jk6d">₹605</div>]
```

In [26]:

```
1 product_price=[]  
2 for i in range(0,len(price)):  
3     product_price.append(price[i].get_text())  
4  
5 print(product_price)
```

```
['₹605']
```

In [27]:

```
1 price[i].get_text()
```

Out[27]:

```
'₹605'
```

CUSTOMER NAME

In [30]:

```
1 names=soup.find_all("p",class_="_2sc7ZR _2V5EHH")
2 names
```

Out[30]:

```
[<p class="_2sc7ZR _2V5EHH">Flipkart Customer</p>,
<p class="_2sc7ZR _2V5EHH">Hirendra Joshi</p>,
<p class="_2sc7ZR _2V5EHH">Chunduri Avinash</p>,
<p class="_2sc7ZR _2V5EHH">SWARNADIP SAHOO</p>,
<p class="_2sc7ZR _2V5EHH">MALLIKARJUNA SALA</p>,
<p class="_2sc7ZR _2V5EHH">K. R. Karthikeyan</p>,
<p class="_2sc7ZR _2V5EHH">arindrajit patra</p>,
<p class="_2sc7ZR _2V5EHH">Apurba Basu</p>,
<p class="_2sc7ZR _2V5EHH">Kannan Kannan</p>,
<p class="_2sc7ZR _2V5EHH">Sumit Ravi</p>]
```

In [31]:

```
1 cust_name=[]
2 for i in range(0,len(names)):
3     cust_name.append(names[i].get_text())
4 cust_name
```

Out[31]:

```
['Flipkart Customer',
'Hirendra Joshi',
'Chunduri Avinash',
'SWARNADIP SAHOO',
'MALLIKARJUNA SALA',
'K. R. Karthikeyan',
'arindrajit patra',
'Apurba Basu',
'Kannan Kannan',
'Sumit Ravi']
```

REVIEWS

In [32]:

```
1 review=soup.find_all("p",class_="_2-N8zT")
2 review
```

Out[32]:

```
[<p class="_2-N8zT">Perfect product!</p>,
<p class="_2-N8zT">Wonderful</p>,
<p class="_2-N8zT">Terrific purchase</p>,
<p class="_2-N8zT">Wonderful</p>,
<p class="_2-N8zT">Good</p>,
<p class="_2-N8zT">Must buy!</p>,
<p class="_2-N8zT">Classy product</p>,
<p class="_2-N8zT">Excellent</p>,
<p class="_2-N8zT">Pretty good</p>,
<p class="_2-N8zT">Pretty good</p>]
```

In [33]:

```
1 cust_rev=[]
2 for i in range(0,len(review)):
3     cust_rev.append(review[i].get_text())
4 cust_rev
```

Out[33]:

```
['Perfect product!',
 'Wonderful',
 'Terrific purchase',
 'Wonderful',
 'Good',
 'Must buy!',
 'Classy product',
 'Excellent',
 'Pretty good',
 'Pretty good']
```

STAR RATING

In [37]:

```
1 rating=soup.find_all("div",class_="_3LWZlK _1BLPMq")
2 rating
```

Out[37]:

```
[<div class="_3LWZlK _1BLPMq">5</div>,
  <div class="_3LWZlK _1BLPMq">4</div>,
  <div class="_3LWZlK _1BLPMq">5</div>,
  <div class="_3LWZlK _1BLPMq">5</div>,
  <div class="_3LWZlK _1BLPMq">3</div>,
  <div class="_3LWZlK _1BLPMq">5</div>,
  <div class="_3LWZlK _1BLPMq">5</div>,
  <div class="_3LWZlK _1BLPMq">5</div>,
  <div class="_3LWZlK _1BLPMq">4</div>,
  <div class="_3LWZlK _1BLPMq">4</div>]
```

In [38]:

```

1 cust_rating=[]
2 for i in range(0,len(rating)):
3     cust_rating.append(rating[i].get_text())
4 cust_rating

```

Out[38]:

```
['5', '4', '5', '5', '3', '5', '5', '5', '4', '4']
```

COMMENTS

In [39]:

```

1 comment=soup.find_all("div",class_="t-ZTKy")
2 comment

```

Out[39]:

```

[<div class="t-ZTKy"><div><div class="">Easy to learn for beginners 😊😊😊
</div><span class="_1H-bmy"><span>READ MORE</span></span></div></div>,
<div class="t-ZTKy"><div><div class="">awesome book for learning python pro
gramming<br/>...</div><span class="_1H-bmy"><span>READ MORE</span></span></d
iv></div>,
<div class="t-ZTKy"><div><div class="">product is very nice</div><span clas
s="_1H-bmy"><span>READ MORE</span></span></div></div>,
<div class="t-ZTKy"><div><div class="">I am very helpful for this product.
</div><span class="_1H-bmy"><span>READ MORE</span></span></div></div>,
<div class="t-ZTKy"><div><div class="">Good book for all students but filpk
art delivery is very bad</div><span class="_1H-bmy"><span>READ MORE</span></
span></div></div>,
<div class="t-ZTKy"><div><div class="">Python programming this book is easy
to learn about basic of python</div><span class="_1H-bmy"><span>READ MORE</s
pan></span></div></div>,
<div class="t-ZTKy"><div><div class="">Good for basic python learning 😊</d
iv><span class="_1H-bmy"><span>READ MORE</span></span></div></div>,
<div class="t-ZTKy"><div><div class="">Nice 🙌🙌</div><span class="_1H-bm
y"><span>READ MORE</span></span></div></div>,
<div class="t-ZTKy"><div><div class="">Delivery good but book is no use</di
v><span class="_1H-bmy"><span>READ MORE</span></span></div></div>,
<div class="t-ZTKy"><div><div class="">Everything is good I read for approx
imately one month and giving a review but pages are black I thought it I'll
be colorful.</div><span class="_1H-bmy"><span>READ MORE</span></span></div>
</div>]

```

In [40]:

```
1 cust_comment=[]
2 for i in range(0,len(comment)):
3     cust_comment.append(comment[i].get_text())
4 cust_comment
```

Out[40]:

```
['Easy to learn for beginners 😊😊😊 READ MORE',
 'awesome book for learning python programming...READ MORE',
 'product is very niceREAD MORE',
 'I am very helpful for this product.READ MORE',
 'Good book for all students but filpkart delivery is very badREAD MORE',
 'Python programming this book is easy to learn about basic of pythonREAD MO
RE',
 'Good for basic python learning 😊 READ MORE',
 'Nice 🙌🙌 READ MORE',
 'Delivery good but book is no useREAD MORE',
 "Everything is good I read for approximately one month and giving a review
but pages are black I thought it I'll be colorful.READ MORE"]
```

DATAFRAME

In [41]:

```
1 import pandas as pd
```

In [42]:

```
1 df=pd.DataFrame()
```

In [43]:

```
1 df["Customer Names"]=cust_name
2 df["Customer Review"]=cust_rev
3 df["Customer Comment"]=cust_comment
4 df["Ratings"]=cust_rating
```


In [46]:

1 df

Out[46]:

	Customer Names	Customer Review	Customer Comment	Ratings
0	Flipkart Customer	Perfect product!	Easy to learn for beginners 😊😊😊 READ MORE	5
1	Hirendra Joshi	Wonderful	awesome book for learning python programming.....	4
2	Chunduri Avinash	Terrific purchase	product is very nice READ MORE	5
3	SWARNADIP SAHOO	Wonderful	I am very helpful for this product. READ MORE	5
4	MALLIKARJUNA SALA	Good	Good book for all students but filpkart delive...	3
5	K. R. Karthikeyan	Must buy!	Python programming this book is easy to learn ...	5
6	arindrajit patra	Classy product	Good for basic python learning 😊 READ MORE	5
7	Apurba Basu	Excellent	Nice 🧐🧐 READ MORE	5
8	Kannan Kannan	Pretty good	Delivery good but book is no use READ MORE	4
9	Sumit Ravi	Pretty good	Everything is good I read for approximately on...	4

In [47]:

1 df.T

Out[47]:

	0	1	2	3	4	5
Customer Names	Flipkart Customer	Hirendra Joshi	Chunduri Avinash	SWARNADIP SAHOO	MALLIKARJUNA SALA	K. R. Karthikeyan
Customer Review	Perfect product!	Wonderful	Terrific purchase	Wonderful	Good	Must buy!
Customer Comment	Easy to learn for beginners 😊😊😊 READ MORE	awesome book for learning python programming.....	product is very nice READ MORE	I am very helpful for this product. READ MORE	Good book for all students but filpkart delive...	Python programming this book is easy to learn ...
Ratings	5	4	5	5	3	5

In [48]:

1 df.shape

Out[48]:

(10, 4)

In [49]:

```
1 df.size
```

Out[49]:

40

In [50]:

```
1 df.columns
```

Out[50]:

```
Index(['Customer Names', 'Customer Review', 'Customer Comment', 'Ratings'],
      dtype='object')
```

In [51]:

```
1 df.ndim
```

Out[51]:

2

CSV FILE

In [52]:

```
1 df.to_csv("Python Book FlipKart Review",index=False)
```

In [54]:

```
1 df=pd.read_csv("Python Book FlipKart Review")
2 df
```

Out[54]:

	Customer Names	Customer Review	Customer Comment	Ratings
0	Flipkart Customer	Perfect product!	Easy to learn for beginners 😊😊😊 READ MORE	5
1	Hirendra Joshi	Wonderful	awesome book for learning python programming.....	4
2	Chunduri Avinash	Terrific purchase	product is very nice READ MORE	5
3	SWARNADIP SAHOO	Wonderful	I am very helpful for this product. READ MORE	5
4	MALLIKARJUNA SALA	Good	Good book for all students but filpkart delive...	3
5	K. R. Karthikeyan	Must buy!	Python programming this book is easy to learn ...	5
6	arindrajit patra	Classy product	Good for basic python learning 😊 READ MORE	5
7	Apurba Basu	Excellent	Nice 🙌🙌 READ MORE	5
8	Kannan Kannan	Pretty good	Delivery good but book is no use READ MORE	4
9	Sumit Ravi	Pretty good	Everything is good I read for approximately on...	4

In [64]:

1 df.info()

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 10 entries, 0 to 9
Data columns (total 4 columns):
#   Column                Non-Null Count  Dtype
---  -
0   Customer Names        10 non-null     object
1   Customer Review        10 non-null     object
2   Customer Comment       10 non-null     object
3   Ratings                10 non-null     int64
dtypes: int64(1), object(3)
memory usage: 448.0+ bytes
```

In [67]:

1 df.head()

Out[67]:

	Customer Names	Customer Review	Customer Comment	Ratings
0	Flipkart Customer	Perfect product!	Easy to learn for beginners 😊😊😊 READ MORE	5
1	Hirendra Joshi	Wonderful	awesome book for learning python programming.....	4
2	Chunduri Avinash	Terrific purchase	product is very nice READ MORE	5
3	SWARNADIP SAHOO	Wonderful	I am very helpful for this product. READ MORE	5
4	MALLIKARJUNA SALA	Good	Good book for all students but filpkart delive...	3

In [68]:

1 df.tail()

Out[68]:

	Customer Names	Customer Review	Customer Comment	Ratings
5	K. R. Karthikeyan	Must buy!	Python programming this book is easy to learn ...	5
6	arindrajit patra	Classy product	Good for basic python learning 😊 READ MORE	5
7	Apurba Basu	Excellent	Nice 🧡🧡 READ MORE	5
8	Kannan Kannan	Pretty good	Delivery good but book is no use READ MORE	4
9	Sumit Ravi	Pretty good	Everything is good I read for approximately on...	4

In [55]:

```
1 df["Customer Review"]  
2
```

Out[55]:

```
0    Perfect product!  
1         Wonderful  
2    Terrific purchase  
3         Wonderful  
4             Good  
5         Must buy!  
6    Classy product  
7         Excellent  
8    Pretty good  
9    Pretty good  
Name: Customer Review, dtype: object
```

In [69]:

```
1 df["Customer Review"].sort_values()
```

Out[69]:

```
6    Classy product  
7         Excellent  
4             Good  
5         Must buy!  
0    Perfect product!  
8    Pretty good  
9    Pretty good  
2    Terrific purchase  
1         Wonderful  
3         Wonderful  
Name: Customer Review, dtype: object
```

In [75]:

```
1 df[df.Ratings==5]["Customer Names"]
```

Out[75]:

```
0    Flipkart Customer  
2    Chunduri Avinash  
3    SWARNADIP SAHOO  
5    K. R. Karthikeyan  
6    arindrajit patra  
7    Apurba Basu  
Name: Customer Names, dtype: object
```

In [56]:

```
1 df["Ratings"].min()
```

Out[56]:

3

In [57]:

```
1 df["Ratings"].unique()  
2
```

Out[57]:

```
array([5, 4, 3], dtype=int64)
```

In [58]:

```
1 df["Ratings"].value_counts()
```

Out[58]:

```
5    6  
4    3  
3    1  
Name: Ratings, dtype: int64
```

In [77]:

```
1 df.loc[[2,4,6],["Customer Names","Customer Comment"]]
```

Out[77]:

	Customer Names	Customer Comment
2	Chunduri Avinash	product is very niceREAD MORE
4	MALLIKARJUNA SALA	Good book for all students but filpkart delive...
6	arindrajit patra	Good for basic python learning 😊 READ MORE

VISUALIZATION

In [59]:

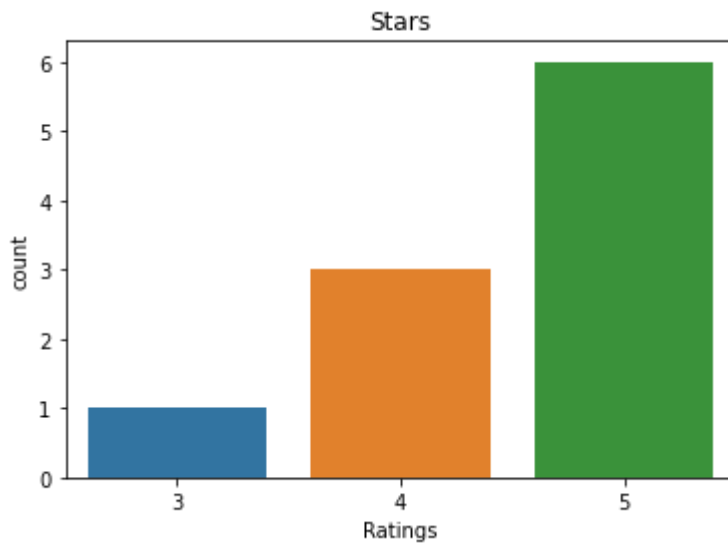
```
1 import matplotlib.pyplot as plt  
2 import seaborn as sns
```

In [60]:

```
1 sns.countplot(x=df["Ratings"])
2 plt.title("Stars")
```

Out[60]:

Text(0.5, 1.0, 'Stars')



In [62]:

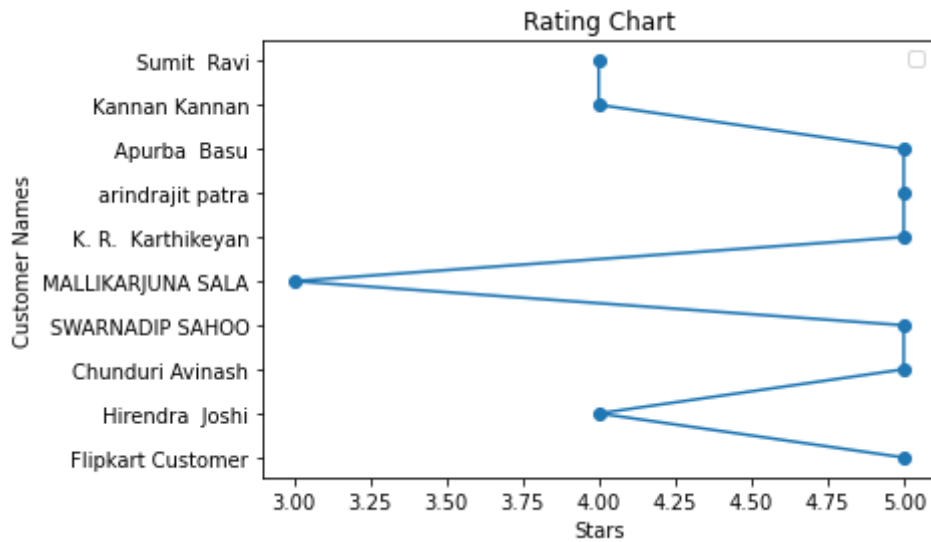
```
1 data=['5', '4', '5', '5', '3', '5', '5', '5', '4', '4']
2 plt.pie(x=data, labels=data, explode=(0,0,0.2,0.3,0,0.2,0.3,0.2,0,0), autopct="%1.1f")
3 plt.show()
```



In [63]:

```
1 plt.plot(df["Ratings"],df["Customer Names"],marker="o")
2 plt.xlabel("Stars")
3 plt.ylabel("Customer Names")
4 plt.legend()
5 plt.title("Rating Chart")
6 plt.show()
```

No handles with labels found to put in legend.



In []:

1