eBay

eBay Project

INDEX

1.WEB SCRAPING: EBAY SNEAKER CATEGORY

1. Scrape data for all products from the first 5 pages.
2. Extract details: product link, product title, price, reviews, likes.

2.DATA HANDLING

1. Export scraped data into a CSV file.
2. Import data from the CSV file for further analysis.

3.DATA CLEANING/WRANGLING

1. Handle missing values.
2. Perform feature engineering.
3. Replace incorrect or inconsistent values.
4. Correct data structure issues.

4.EXPLORATORY DATA ANALYSIS (EDA)

1. Analyze the cleaned data to extract insights.
2. Visualize key patterns and trends.

IMPORT LIBRARIES

```
import requests
from bs4 import BeautifulSoup
import pandas as pd
import numpy as np
from skimpy import skim
import seaborn as sns
import matplotlib.pyplot as plt
import warnings
warnings.filterwarnings("ignore")
headers = {"User-Agent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.124 Safari/537.36"}
```

Step-1 Ebay Web-scraping

1.Create a list to store product link which are scraped from the ebay website.
2. Requests-> to extract html data from website.
3. Soup -> to extract particular tags for the product links.
4. Using loop extract first 5-pages products link for scraping details like: title, price, review, likes

NOTE: each page show only 60 products

```
78]: # creating dictionary to store title and other details
     product_link=[]
     for page_num in range(0,5):
         link = "https://www.ebay.com/sch/i.html?_from=R40&_nkw=sneakers&_sacat=0&_pgn=" + str(page_num) + "&rt=nc"
         page = requests.get(link,"html",headers=headers)
         soup = BeautifulSoup(page.content, 'html.parser')

         # store links in product link list
         all_products = soup.find_all("ul", attrs={"class": "srp-results srp-grid clearfix"})
         for link in all_products:
             a_tags = link.find_all("a", attrs={"class": "s-item__link"})
             for a in a_tags:
                 product_link.append(a['href'])
         print("page",page_num,"link scraped and store in product_link")
     page 0 link scraped and store in product_link
     page 1 link scraped and store in product_link
     page 2 link scraped and store in product_link
     page 3 link scraped and store in product_link
     page 4 link scraped and store in product_link
```

Extracted product link and total links extracted

```
product_link[:4]
```

```
['https://www.ebay.com/itm/196549827917?_skw=sneakers&itmmeta=01JC2DXGFSER5NNVHSCZDCBQTN&hash=item2dc3485d4d%3Ag%3A9hAAAOSw00xmtRGr&itmprp=enc%3AAQAJAAA
AwHoV3kP08IDx%2BKZ9MfhVJKl%2BgNnlEQ68tz9pldKmNr%2F1pBw1lEk%2FfyzPcfIiPz6UssIaOIyZzqccUWw2usFJgrvu1TfLbj%2BMfuc6E%2FYj3bBpGOeEHLUayd8g%2F3sbqEAS1UgzODKe0
y%2BPR%2FE996LyTGe3bt6LsOtNLRaU%2FP3OBhCeWmZ4EVpbIvSKqssCoOjhqFCmcOrUOHGWOLDF7E%2BqBfXd6Dkh%2BNK%2By%2BYoD%2Befk2q2WpSgrEPyHgd%2BQiMOUPTOMw%3D%3D%7Ctkp%
3ABlBMUICI9s3gZA&var=496318587386',
 'https://www.ebay.com/itm/176513863714?_skw=sneakers&itmmeta=01JC2DXGFSN3N1ENND83FPND3H&hash=item29190bd022%3Ag%3ANfUAAOSwK81mtRMX&itmprp=enc%3AAQAJAAA
AwHoV3kP08IDx%2BKZ9MfhVJKngBtFty1%2FsGFot8WTribDx9OtcC0AUTf902w7OmW59RvCiHtXs41Y6t7VoFPwb%2Fy1uMIXV0Zy6rC8dTnYyaINJsFHLY0alQ%2BBafiDZEMe4NXo8Wl0gsGHEAq%
2Fm8GCiNlqscdbQMfurn7Mjg0zV6KOMTSs3vZxB5q1%2B1kQ9FD2AILladAvWQXHc59KIxkFQ9n9AaqNuQWl6kaWFln9r3D%2BVSlT4VlxHUmePQ%2BLf2SGiZA%3D%3D%7Ctkp%3ABlBMUICI9s3gZA
&var=476111946700',
 'https://www.ebay.com/itm/296765559816?_skw=sneakers&itmmeta=01JC2DXGFSQVCYNVZVVSPD6ZAD&hash=item45189b1408%3Ag%3APpUAAOSwSyBnFfY-&itmprp=enc%3AAQAJAAA
AwHoV3kP08IDx%2BKZ9MfhVJKmMRt4a1EwtEeibG5otvdBUiTVf5aSCwcLHADR3xO%2FkVDbIXTwzCA31aE1w1RNb37PkHM9AFQmk0MRyFEQno29%2F4XT3QW5JTDmdUGRb73%2FobWiXD4J%2FYmeDE
JVqkLyaRy%2BllgZxhF1bTAtppw2eYn7fslvib40gAUGsrJwE6FL7uHK1jbFQEwxHgnzoa9UDFYmD9hjyoyToZ6c%2BLSL14Xn1gvjEkKYoTytUSpYeRkVRkA%3D%3D%7Ctkp%3ABk9SR4CI9s3gZA&v
ar=594573957545',
 'https://www.ebay.com/itm/205089362973?_skw=sneakers&epid=10064575364&itmmeta=01JC2DXGFS806PS5YS64C2AE0E&hash=item2fc047541d:g:y1oAAOSwD-ZnKvbt&itmprp=
enc%3AAQAJAAAAwHoV3kP08IDx%2BKZ9MfhVJKkcMeqWZtpo%2Fl6RUjBg0h%2FfVBa0u1vW4JmlDwFGzNNSGSXWbz96cX0JnX8SegwsRKhL4DiMfUdt68ToyV70cS4AME1afSp8M9TP7fggK3RQWRt%
2FTpIYbZFpF%2F98pcLuyhMOdVw1oCUbfUTF%2BJSonPBoweTNC0Jj5ZvYtdUZDm0f%2FEUqstyDswnwnVy61fRKVvRWO8NqJBdbiYk6iTWZaQ2EpPuMoeGaRdy9Q0LC7tC5fQ%3D%3D%7Ctkp%3ABk9
SR4CI9s3gZA']
```

```
len(product_link)
```

```
300
```

Create function to extract title from link through new variable single_p_soup

```
# creating function to extract product title from product page

def get_title(single_p_soup):
    try:
        product_title=single_p_soup.find("span",attrs={"class":"ux-textspans ux-textspans--BOLD"}).text.strip()
    except:
        product_title= ""

    return product_title
```

Create function to extract Price from link through new variable single_p_soup

```
# creating function to extract price from product page (price will contain value review and price)

def get_price(single_p_soup):
    try:
        product_price=single_p_soup.find("div",attrs={"class":"x-price-primary"}).text
    except:
        product_price= ""

    return product_price
```

Create function to extract Review from link through new variable single_p_soup

```
# creating function to extract review from product page

def get_review(single_p_soup):
    try:
        product_review=single_p_soup.find("span",attrs={"class":"SECONDARY"}).text.strip("()")
    except:
        product_review= ""

    return product_review
```

Create function to extract Likes from link through new variable single_p_soup

```
# creating function to extract review from product page

def get_likes(single_p_soup):
    try:
        product_likes=single_p_soup.find("span",attrs={"class":"x-watch-heart-btn-text"}).text.strip()
    except:
        product_likes= ""

    return product_likes
```

Create dictionary to store scraped data

```
# open prodct link 1 by 1 and scrap data and store it in dictionary
d={"Title":[],"Price":[], "Review":[],"likes":[]}
for i in product_link:
    product_page = requests.get(i, headers=headers)
    single_p_soup=BeautifulSoup(product_page.content,"html.parser")

    d["Title"].append(get_title(single_p_soup))
    d["Price"].append(get_price(single_p_soup))
    d["Review"].append(get_review(single_p_soup))
    d["likes"].append(get_likes(single_p_soup))
print("Data successfully added in dictionary -> d")
```

```
Data successfully added in dictionary -> d
```

Create dictionary to store scraped data from product page from links which stored into product links list and
total scraped data length

```
# open prodct link 1 by 1 and scrap data and store it in dictionary
d={"Title":[],"Price":[], "Review":[],"likes":[]}
for i in product_link:
    product_page = requests.get(i, headers=headers)
    single_p_soup=BeautifulSoup(product_page.content,"html.parser")

    d["Title"].append(get_title(single_p_soup))
    d["Price"].append(get_price(single_p_soup))
    d["Review"].append(get_review(single_p_soup))
    d["likes"].append(get_likes(single_p_soup))
print("Data successfully added in dictionary -> d")
```

```
Data successfully added in dictionary -> d
```

```
# check length of each column before creating dataframe
print("Extracted Title : ",len(d["Title"]))
print("Extracted Price: ",len(d["Price"]))
print("Extracted Review: ",len(d["Review"]))
print("Extracted Likes: ",len(d["likes"]))
```

```
Extracted Title :  300
Extracted Price:  300
Extracted Review:  300
Extracted Likes:  300
```

add prduct links into dictionary
and create dataframe from dictionary with name ebay5

```
# add product link into dictionary
d["Product_Link"]=product_link
```

```
# adding dict data into dataframe
ebay5=pd.DataFrame.from_dict(d)
```

```
ebay5
```

	Title	Price	Review	likes	Product_Link
0	Women's Shoes UGG LOWMEL Suede & Canvas High T...	US $119.95	51,710	33	https://www.ebay.com/itm/196549827917?_skw=sne...
1	Women's Shoes UGG LOWMEL Suede & Canvas High T...	US $119.95	51,710	17	https://www.ebay.com/itm/176513863714?_skw=sne...
2	For Dunk Low Jarritos Unisex Sneakers Fashion ...	US $136.00	7	3	https://www.ebay.com/itm/296765559816?_skw=sne...
3	Brooks Mens Ghost Max 1104061D174 White Runnin...	US $42.74	79,943		https://www.ebay.com/itm/205089362973?_skw=sne...
4	PUMA Men's Turino II Sneakers	US $24.99	466,433	2	https://www.ebay.com/itm/276667684864?_skw=sne...
...	...	...	...	...	...
295	adidas Originals NMD_R1.V2 Boost Black White M...	US $129.99	139,907	1	https://www.ebay.com/itm/364916181934?_skw=sne...
296	AND1 Pulse Mid 2.0 Basketball Mens Blue, Whit...	US $24.99	523,829	6	https://www.ebay.com/itm/405240587292?_skw=sne...
297	Adidas Yeezy Slide Dark Onyx 2024 Black Sandal...	US $117.99	3,562	8	https://www.ebay.com/itm/167059903701?_skw=sne...

Step-2 Import & Export Data

Export scraped data into csv format and import the same

```
ebay5.to_csv("ebay5page_scrape",header=True,index=False)
print("file export into csv format")
```

```
file export into csv format
```

```
# load export file ebay10page_scrape
df=pd.read_csv("ebay5page_scrape")
df
```

	Title	Price	Review	likes	Product_Link
0	Women's Shoes UGG LOWMEL Suede & Canvas High T...	US $119.95	51,710	33.0	https://www.ebay.com/itm/196549827917?_skw=sne...
1	Women's Shoes UGG LOWMEL Suede & Canvas High T...	US $119.95	51,710	17.0	https://www.ebay.com/itm/176513863714?_skw=sne...
2	For Dunk Low Jarritos Unisex Sneakers Fashion ...	US $136.00	7	3.0	https://www.ebay.com/itm/296765559816?_skw=sne...
3	Brooks Mens Ghost Max 1104061D174 White Runnin...	US $42.74	79,943	NaN	https://www.ebay.com/itm/205089362973?_skw=sne...
4	PUMA Men's Turino II Sneakers	US $24.99	466,433	2.0	https://www.ebay.com/itm/276667684864?_skw=sne...
...	...	...	...	...	...
295	adidas Originals NMD_R1.V2 Boost Black White M...	US $129.99	139,907	1.0	https://www.ebay.com/itm/364916181934?_skw=sne...
296	AND1 Pulse Mid 2.0 Basketball Mens Blue, Whit...	US $24.99	523,829	6.0	https://www.ebay.com/itm/405240587292?_skw=sne...

Step-3 Data Analysis and Data Cleaing

Data summary to check dtype, missing values, memory consumption

```
[200]: df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 300 entries, 0 to 299
Data columns (total 5 columns):
 #   Column        Non-Null Count  Dtype  
---  ------        --------------  -----  
 0   Title         300 non-null    object 
 1   Price         300 non-null    object 
 2   Review        290 non-null    object 
 3   likes         253 non-null    float64
 4   Product_Link  300 non-null    object 
dtypes: float64(1), object(4)
memory usage: 11.8+ KB
```

Price column correction removed dolloar sign and change dtype as float

```
# remove dollar from price columns and change data type as float
df['Price'] = df['Price'].str.extract(r'(\d+\.\d+)').astype(float)
```

```
df.head(5)
```

	Title	Price	Review	likes	Product_Link
0	Women's Shoes UGG LOWMEL Suede & Canvas High T...	119.95	51710	33.0	https://www.ebay.com/itm/196549827917?_skw=sne...
1	Women's Shoes UGG LOWMEL Suede & Canvas High T...	119.95	51710	17.0	https://www.ebay.com/itm/176513863714?_skw=sne...
2	For Dunk Low Jarritos Unisex Sneakers Fashion ...	136.00	7	3.0	https://www.ebay.com/itm/296765559816?_skw=sne...
3	Brooks Mens Ghost Max 1104061D174 White Runnin...	42.74	79943	0.0	https://www.ebay.com/itm/205089362973?_skw=sne...
4	PUMA Men's Turino II Sneakers	24.99	466433	2.0	https://www.ebay.com/itm/276667684864?_skw=sne...

Data summary to check dtype, missing values, memory consumption

```
[200]: df.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 300 entries, 0 to 299
Data columns (total 5 columns):
 #   Column        Non-Null Count  Dtype  
---  ------        --------------  -----  
 0   Title         300 non-null    object 
 1   Price         300 non-null    object 
 2   Review        290 non-null    object 
 3   likes         253 non-null    float64
 4   Product_Link  300 non-null    object 
dtypes: float64(1), object(4)
memory usage: 11.8+ KB
```

Replace “nan” value with “0” in review column before change data type

```
df["Review"].to_list()
```

```
 '223,529',
 '33,315',
 '33,315',
 nan,
 '215',
 '4,789',
 nan,
 '33,315',
 '33,315',
 '33,315',
 '33,315',
 '523,829',
 '223,529',
 nan,
 '2,159',
 '2,679',
 '523,829',
 '139,906',
```

```
df["Review"]=df["Review"].replace(np.nan,"0")
```

```
df["Review"]=df["Review"].str.replace(",","")
```

```
df["Review"].to_list()
```

```
 '139906',
 '33315',
 '33315',
 '33315',
 '0'
```

Change review column datatype object to int32

```
df["Review"]=df["Review"].astype("int")
```

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 300 entries, 0 to 299
Data columns (total 5 columns):
 #   Column        Non-Null Count  Dtype  
---  ------        --------------  -----  
 0   Title         300 non-null    object 
 1   Price         300 non-null    float64
 2   Review        300 non-null    int32  
 3   likes         253 non-null    float64
 4   Product_Link  300 non-null    object 
dtypes: float64(2), int32(1), object(2)
memory usage: 10.7+ KB
```

Fill missing values with 0 in likes columns using replace function

```
df[df["likes"].isnull()].head(2)
```

	Title	Price	Review	likes	Product_Link
3	Brooks Mens Ghost Max 1104061D174 White Runnin...	42.74	79943	NaN	https://www.ebay.com/itm/205089362973?_skw=sne...
5	Mens Mizuno Morelia Neo III Beta Elite Blue US...	70.00	305	NaN	https://www.ebay.com/itm/186767396889?_skw=sne...

```
# replace nan value with 0
df["likes"]=df["likes"].replace(np.NaN,0)
```

```
df.head(5)
```

	Title	Price	Review	likes	Product_Link
0	Women's Shoes UGG LOWMEL Suede & Canvas High T...	119.95	51710	33.0	https://www.ebay.com/itm/196549827917?_skw=sne...
1	Women's Shoes UGG LOWMEL Suede & Canvas High T...	119.95	51710	17.0	https://www.ebay.com/itm/176513863714?_skw=sne...
2	For Dunk Low Jarritos Unisex Sneakers Fashion ...	136.00	7	3.0	https://www.ebay.com/itm/296765559816?_skw=sne...
3	Brooks Mens Ghost Max 1104061D174 White Runnin...	42.74	79943	0.0	https://www.ebay.com/itm/205089362973?_skw=sne...
4	PUMA Men's Turino II Sneakers	24.99	466433	2.0	https://www.ebay.com/itm/276667684864?_skw=sne...

Extract item number form product link column and create new column with name item_number

```
# Feature Enginering - extract item number form product link
df['item_number']=df['Product_Link'].str.extract(r'\/(\d+)\?')
```

```
df.head(2)
```

	Title	Price	Review	likes	Product_Link	item_number
0	Women's Shoes UGG LOWMEL Suede & Canvas High T...	119.95	51710	33.0	https://www.ebay.com/itm/196549827917?_skw=sne...	196549827917
1	Women's Shoes UGG LOWMEL Suede & Canvas High T...	119.95	51710	17.0	https://www.ebay.com/itm/176513863714?_skw=sne...	176513863714

Check again data summary by importing skimmy for better understanding

```
skim(df)
```

skimpy summary

Data Summary

dataframe	Values
Number of rows	300
Number of columns	6

Data Types

Column Type	Count
string	3
float64	2
int32	1

number

column_name	NA	NA %	mean	sd	p0	p25	p50	p75	p100	hist
Price	0	0	90.56	63.23	2.81	45.99	74.99	122.3	623	▇▂▁▁▁
Review	0	0	105400	172500	0	2144	16710	139900	523800	▇▁▁▁▂
likes	0	0	27.2	56.65	0	1	6	27.25	517	▇▁▁▁▁

string

column_name	NA	NA %	words per row	total words
Title	0	0	11	3286
Product_Link	0	0	1	300
item_number	0	0	1	300

End

Check again data summary by importing skimmy for better understanding

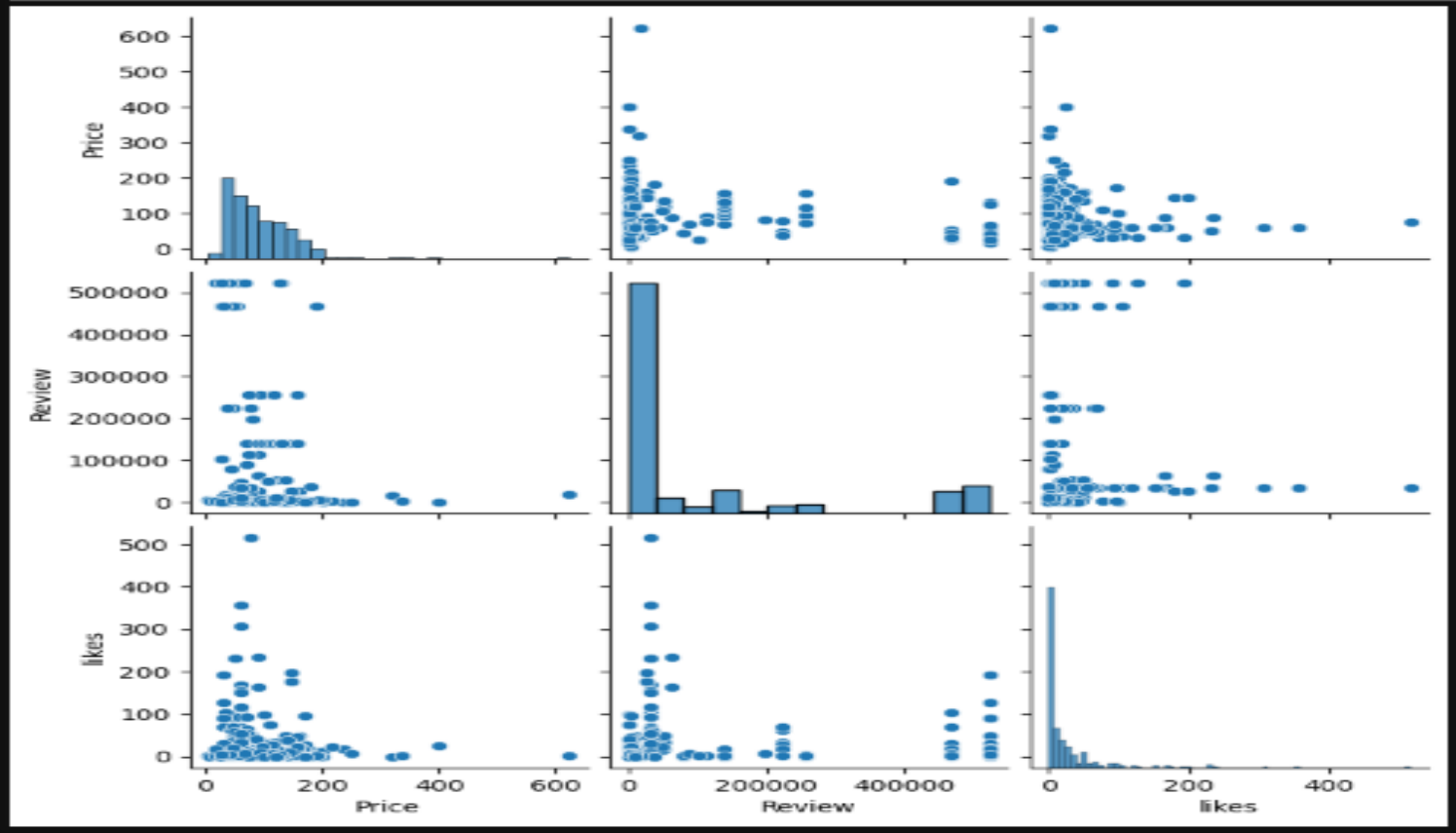
```
# Statistic summary
df.describe().T
```

	count	mean	std	min	25%	50%	75%	max
Price	300.0	90.555267	63.231201	2.81	45.99	74.99	122.3175	622.99
Review	300.0	105396.426667	172471.838149	0.00	2143.75	16714.50	139906.0000	523829.00
likes	300.0	27.203333	56.647847	0.00	1.00	6.00	27.2500	517.00

Step-4 Exploratory Data Analysis (EDA)

Check relation between all numerical columns

```
# create pairplot to check relationship between all numerical columns
sns.pairplot(df)
plt.show()
```

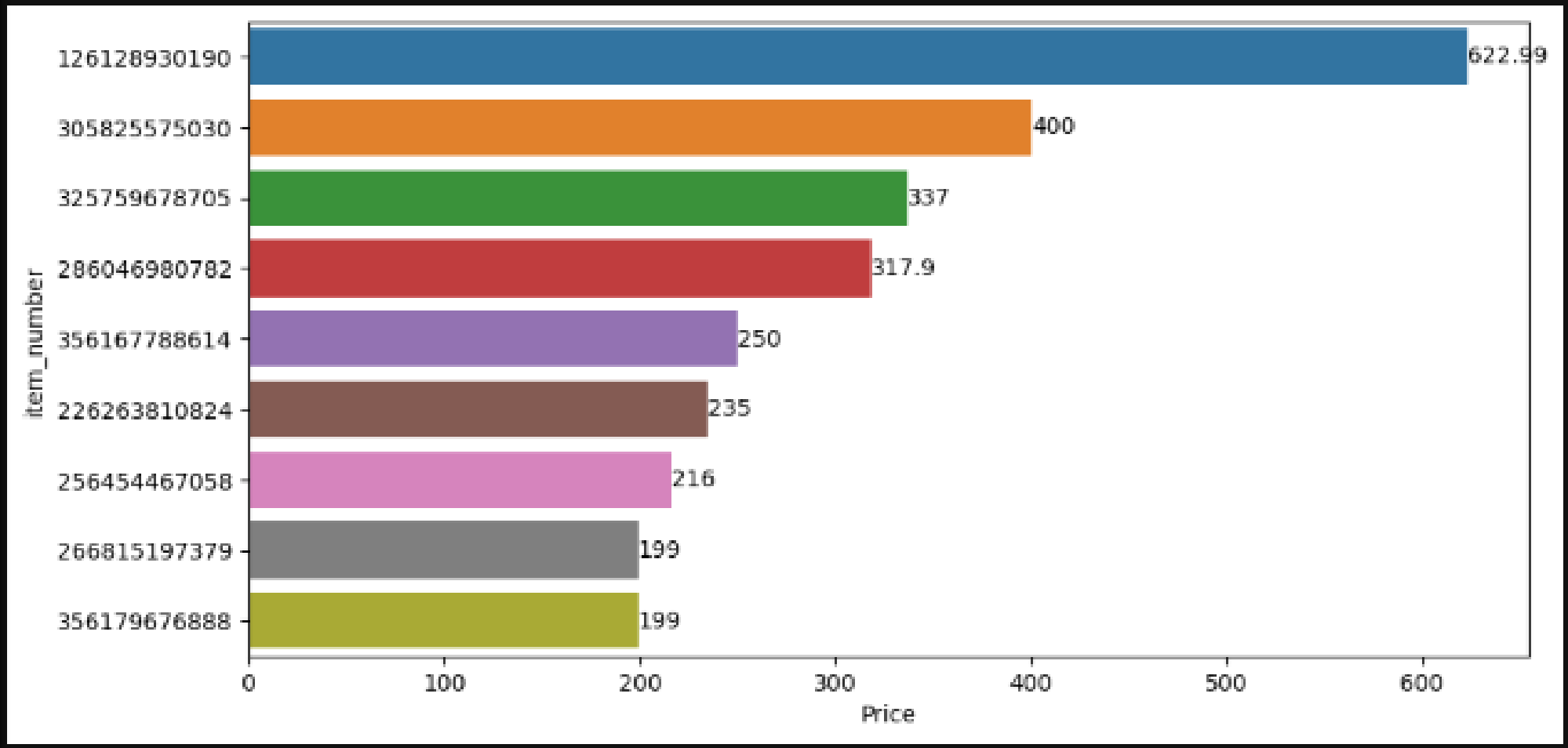


10 Product which have highest price among all products

```
# top 10 highest price product in sneaker category in ebay
highest_price_product=df.sort_values(by="Price",ascending=False).head(10)
highest_price_product
```

	Title	Price	Review	likes	Product_Link	item_number
270	Valentino Garavani Ready Go Runner Wool Sock S...	622.99	17606	2.0	https://www.ebay.com/itm/126128930190?_skw=sne...	126128930190
132	FTP Osiris D3 2001 Size 12	400.00	85	25.0	https://www.ebay.com/itm/305825575030?_skw=sne...	305825575030
235	HOGAN men shoes Hogan-3R Recycle H590 sneaker ...	337.00	2098	1.0	https://www.ebay.com/itm/325759678705?_skw=sne...	325759678705
208	Isaia White Leather Sneakers Shoes ID553A Man	317.90	15612	0.0	https://www.ebay.com/itm/286046980782?_skw=sne...	286046980782
183	Adidas Yeezy Boost 700 V3 Dark US Size 9 Perfe...	250.00	25	8.0	https://www.ebay.com/itm/356167788614?_skw=sne...	356167788614
123	Lanvin Paris Leather DDB0 Sneakers Size 44 New...	235.00	98	19.0	https://www.ebay.com/itm/226263810824?_skw=sne...	226263810824
220	IF9280 TMNT Teenage Mutant Ninja Turtles adida...	216.00	2679	22.0	https://www.ebay.com/itm/256454467058?_skw=sne...	256454467058
39	New Kiton Napoli Suede Leather Fashion Sneaker...	199.00	129	12.0	https://www.ebay.com/itm/266815197379?_skw=sne...	266815197379
99	New Kiton Napoli Suede Leather Fashion Sneaker...	199.00	129	12.0	https://www.ebay.com/itm/266815197379?_skw=sne...	266815197379
230	adidas Originals Country Japan IG4554 Preloved...	199.00	5004	0.0	https://www.ebay.com/itm/356179676888?_skw=sne...	356179676888

```
plt.figure(figsize=(10,5))
hpp=sns.barplot(data=highest_price_product,x="Price",y="item_number")
for i in hpp.containers:
    hpp.bar_label(i)
plt.show()
```

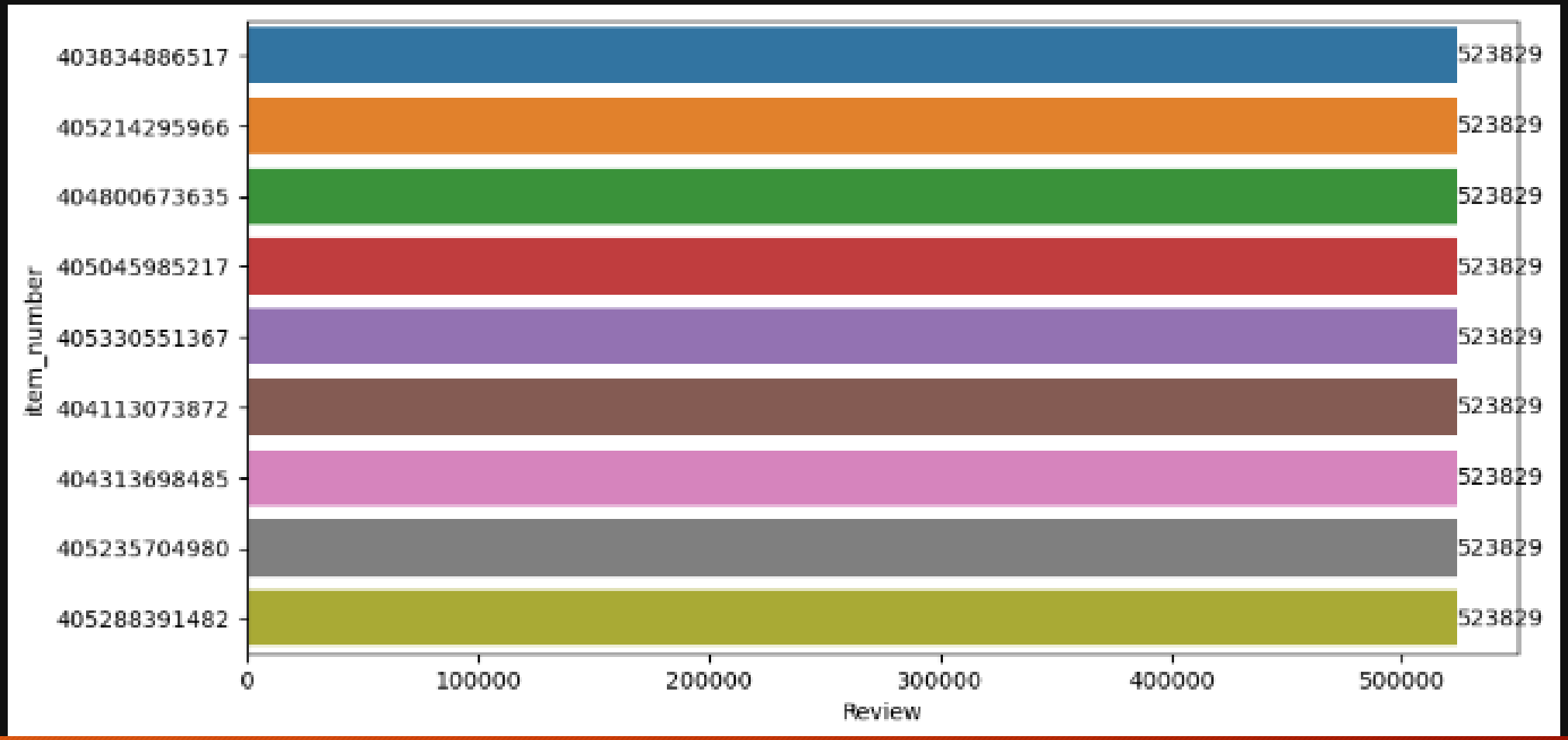


10 Product which have highest review among all products

```
# top 10 highest review product in sneaker category in ebay
highest_review_product=df.sort_values(by="Review",ascending=False).head(10)
highest_review_product
```

	Title	Price	Review	likes	Product_Link	item_number
265	Puma Triple Mid Basketball Mens Red Sneakers ...	29.99	523829	91.0	https://www.ebay.com/itm/4038348865 17?_skw=sne...	4038348865 17
173	Puma Bmw Mms RCat Machina Lace Up Mens Black,...	39.99	523829	2.0	https://www.ebay.com/itm/4052142959 66?_skw=sne...	4052142959 66
34	Puma Bmw Mms RCat Machina Lace Up Mens Black,...	39.99	523829	2.0	https://www.ebay.com/itm/4052142959 66?_skw=sne...	4052142959 66
281	Avia AviFactor 2.0 Running Mens Beige Sneaker...	29.99	523829	31.0	https://www.ebay.com/itm/4048006736 35?_skw=sne...	4048006736 35
283	Puma Suede Triplex Lace Up Mens Red Sneakers ...	44.99	523829	21.0	https://www.ebay.com/itm/4050459852 17?_skw=sne...	4050459852 17
57	adidas Yeezy Foam Rnr Slip On Youth Boys Bro...	59.99	523829	1.0	https://www.ebay.com/itm/4053305513 67?_skw=sne...	4053305513 67
260	Puma Viz Runner Repeat Running Mens Black Sne...	49.99	523829	26.0	https://www.ebay.com/itm/4041130738 72?_skw=sne...	4041130738 72
50	Puma Ca Pro Embroidered Lace Up Mens White Sn...	29.99	523829	127.0	https://www.ebay.com/itm/4043136984 85?_skw=sne...	4043136984 85
284	Puma Electrify Nitro 2 Running Mens Black Sne...	54.99	523829	3.0	https://www.ebay.com/itm/4052357049 80?_skw=sne...	4052357049 80
206	Puma Mb.04 La France Basketball Mens Blue Sne...	124.99	523829	0.0	https://www.ebay.com/itm/4052883914 82?_skw=sne...	4052883914 82

```
plt.figure(figsize=(10,5))
hrp=sns.barplot(data=highest_review_product,x="Review",y="item_number")
for i in hrp.containers:
    hrp.bar_label(i)
plt.show()
```

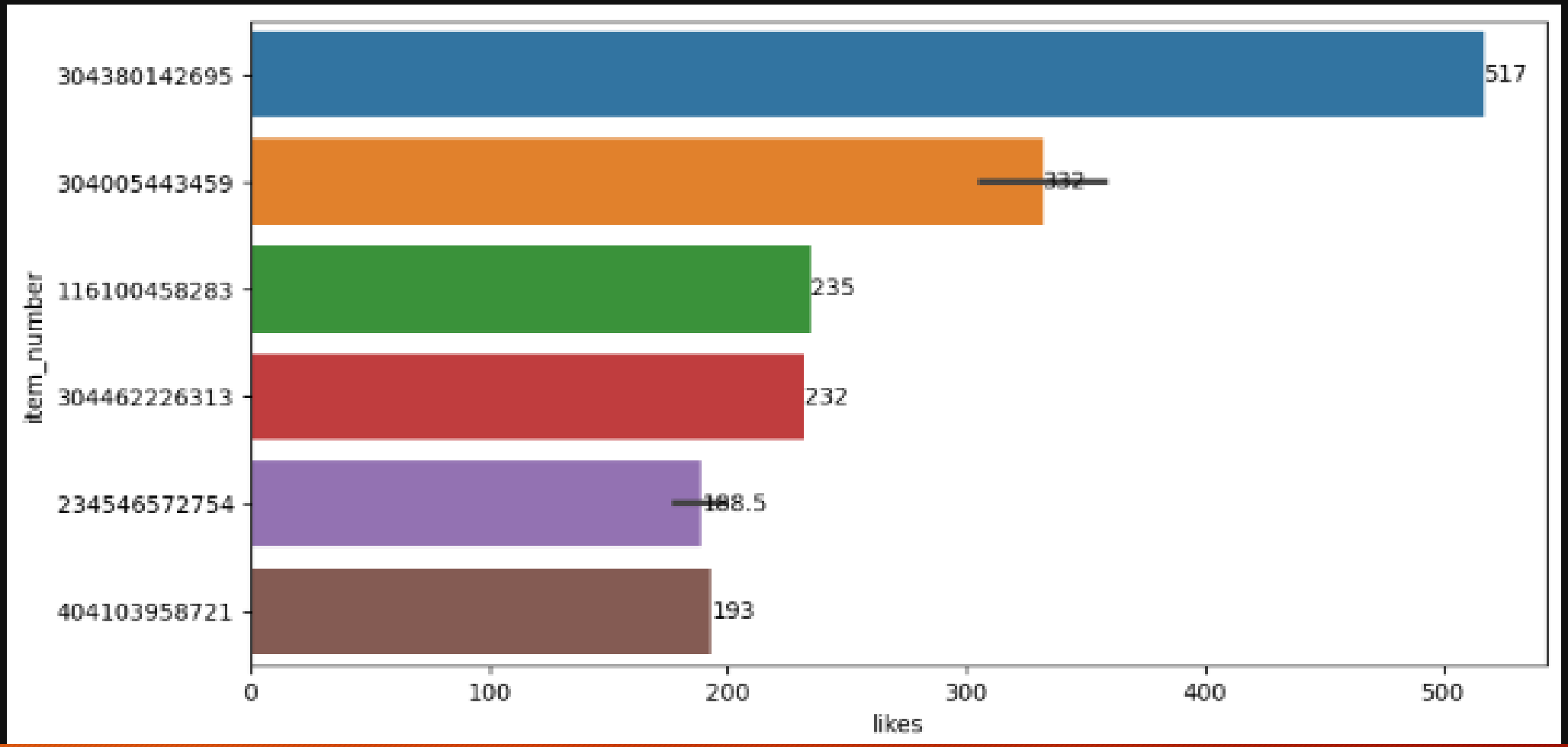


10 Product which have highest likes among all products

```
# top 10 highest like product in sneaker category in ebay
highest_like_product=df.sort_values(by="likes",ascending=False).head(10)
highest_like_product
```

	Title	Price	Review	likes	Product_Link	item_number
152	Adidas Adizero Ubersonic 4.1 CL Men's Tennis S...	74.95	33315	517.0	https://www.ebay.com/itm/304380142695?_skw=sne...	304380142695
6	Reebok Classic Nylon Men's Running Shoe Black ...	59.95	33315	358.0	https://www.ebay.com/itm/304005443459?_skw=sne...	304005443459
68	Reebok Classic Nylon Men's Running Shoe Black ...	59.95	33315	306.0	https://www.ebay.com/itm/304005443459?_skw=sne...	304005443459
37	Air Force 1 '07 White/ Black CT2302-100 Fashio...	88.35	63683	235.0	https://www.ebay.com/itm/116100458283?_skw=sne...	116100458283
124	Adidas Vs Pace 2.0 Men's Skate Shoe White Athl...	49.95	33315	232.0	https://www.ebay.com/itm/304462226313?_skw=sne...	304462226313
24	Adidas Vs Pace 2.0 Men's Skate Shoe White Athl...	49.95	33315	232.0	https://www.ebay.com/itm/304462226313?_skw=sne...	304462226313
116	Adidas Vs Pace 2.0 Men's Skate Shoe White Athl...	49.95	33315	232.0	https://www.ebay.com/itm/304462226313?_skw=sne...	304462226313
215	New NIKE Air Max 90 Men's classic Athletic Sne...	144.99	26477	199.0	https://www.ebay.com/itm/234546572754?_skw=sne...	234546572754
126	Puma Twitch Runner Trail Running Mens Black S...	29.99	523829	193.0	https://www.ebay.com/itm/404103958721?_skw=sne...	404103958721
56	New NIKE Air Max 90 Men's classic Athletic Sne...	144.99	26477	178.0	https://www.ebay.com/itm/234546572754?_skw=sne...	234546572754

```python
plt.figure(figsize=(10,5))
hlp=sns.barplot(data=highest_like_product,x="likes",y="item_number")
for i in hlp.containers:
    hlp.bar_label(i)
plt.show()
```



Thank You

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github: https://github.com/Nishant6020