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## Web Scraping Project On Puma Outlet

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### **Project for Python Module**

#### **AIM:**

*The primary aim of this project is to offer exclusive discounts on Puma shoes, enhancing brand visibility, and driving customer engagement. By providing our customers with special access to high-quality Puma footwear at a reduced price, we aim to create a win-win scenario for both parties involved.*

## **DESCRIPTIONS:**

*Welcome to the Puma shoes Outlet web scrapping project involves extracting data from websites. This data can be used for various purposes, outlet saving are the part of the shopping experience enjoy year-around discounts on premium product, such as data analysis, research, reporting, or populating databases. We are going to use puma shoes to scrape site. To do so, we are going to use tools like Python, Requests, BeautifulSoup.*

## **Purposes:**

*The project will involve the promotion and sale of Puma shoes through our platform. We plan to implement a targeted marketing strategy to reach a wide audience and generate interest in the discounted Puma products. Our platform will serve as the central hub for customers to explore the curated selection of Puma shoes and take advantage of the exclusive discounts.*

## **Outline:**

*From this site, we are going to grab the following information:*

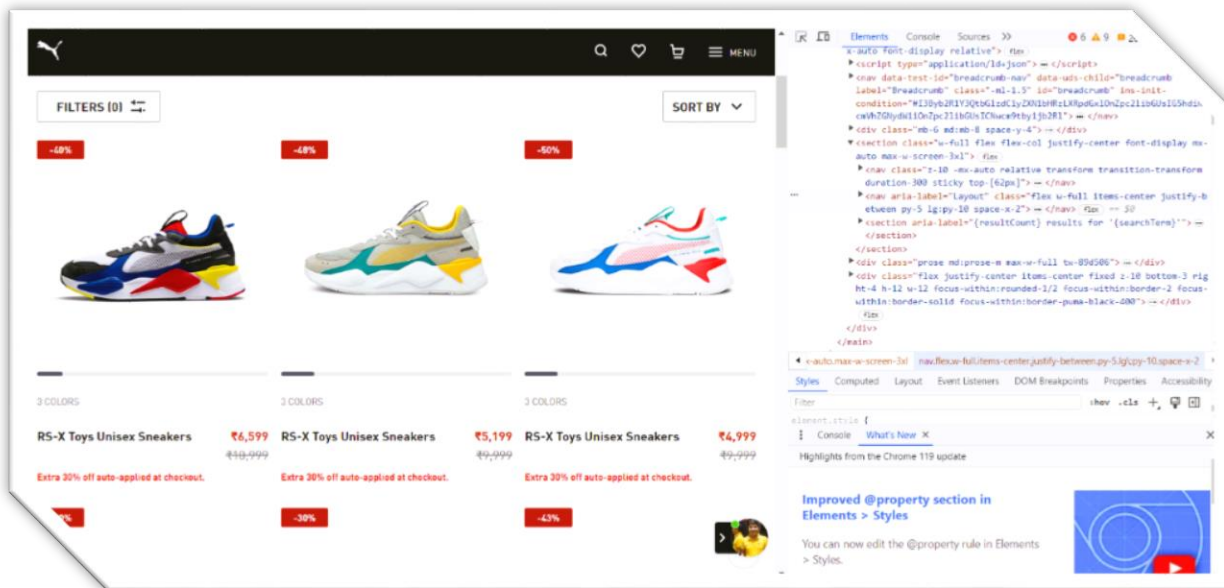
## **steps:**

- 1. Product Name.*
- 2. Original Price.*
- 3. Discounted Price.*
- 4. Discount Price.*

## **Choose the Website and Webpage URL:**

*The first step is to select the website you want to scrape. We will try to extract data on jewellery on the website.*

## Send a Request to the Puma Shoes Page:



## Write the Python source code:

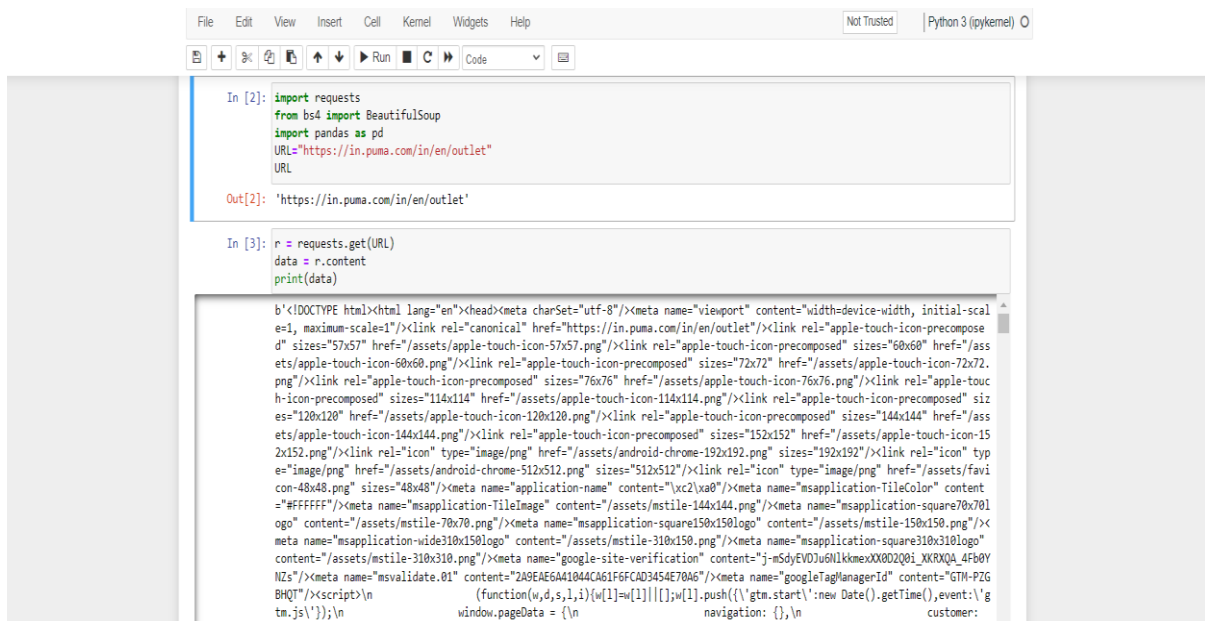
The code will perform the following steps:

- Using requests to send an HTTP GET requests
- Using BeautifulSoup to parse the HTML code
- Extracting the required data from the HTML code
- Store the information in a pandas dataframe

## Exporting the extracted data

We'll export the data as a CSV file. We will use the pandas library. We'll use the pandas library.

## 1. Puma shoes outlet web scraping coddng command steps:



```
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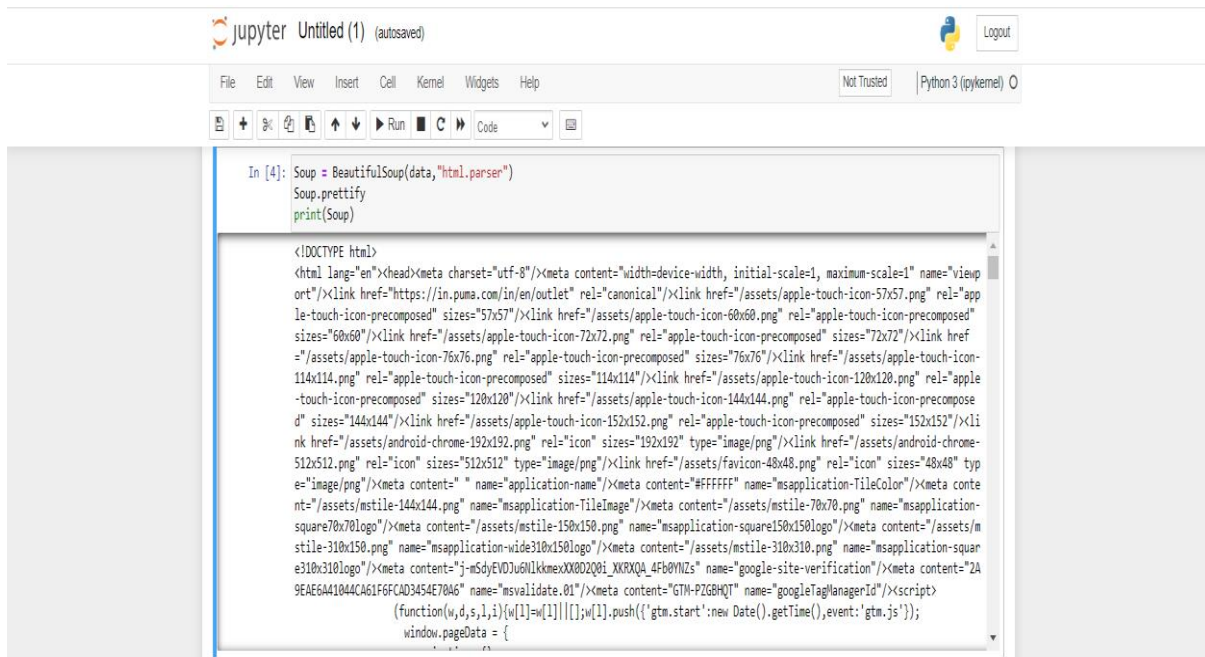
In [2]: import requests
        from bs4 import BeautifulSoup
        import pandas as pd
        URL="https://in.puma.com/in/en/outlet"
        URL

Out[2]: 'https://in.puma.com/in/en/outlet'

In [3]: r = requests.get(URL)
        data = r.content
        print(data)

b'<!DOCTYPE html><html lang="en"><head><meta charset="utf-8"><meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1"><link rel="canonical" href="https://in.puma.com/in/en/outlet"><link rel="apple-touch-icon-precomposed" sizes="57x57" href="/assets/apple-touch-icon-57x57.png"><link rel="apple-touch-icon-precomposed" sizes="60x60" href="/assets/apple-touch-icon-60x60.png"><link rel="apple-touch-icon-precomposed" sizes="72x72" href="/assets/apple-touch-icon-72x72.png"><link rel="apple-touch-icon-precomposed" sizes="76x76" href="/assets/apple-touch-icon-76x76.png"><link rel="apple-touch-icon-precomposed" sizes="114x114" href="/assets/apple-touch-icon-114x114.png"><link rel="apple-touch-icon-precomposed" sizes="120x120" href="/assets/apple-touch-icon-120x120.png"><link rel="apple-touch-icon-precomposed" sizes="144x144" href="/assets/apple-touch-icon-144x144.png"><link rel="apple-touch-icon-precomposed" sizes="152x152" href="/assets/apple-touch-icon-152x152.png"><link rel="icon" type="image/png" href="/assets/android-chrome-192x192.png" sizes="192x192"><link rel="icon" type="image/png" href="/assets/android-chrome-512x512.png" sizes="512x512"><link rel="icon" type="image/png" href="/assets/favicon-48x48.png" sizes="48x48"><meta name="application-name" content="\\xc2\\xa0"><meta name="msapplication-TileColor" content="#FFFFFF"><meta name="msapplication-TileImage" content="/assets/mstile-144x144.png"><meta name="msapplication-square70x70logo" content="/assets/mstile-70x70.png"><meta name="msapplication-square150x150logo" content="/assets/mstile-150x150.png"><meta name="msapplication-wide310x150logo" content="/assets/mstile-310x150.png"><meta name="msapplication-square310x310logo" content="/assets/mstile-310x310.png"><meta name="google-site-verification" content="j-mSdyEVDu6NlkkmeXX002Q0i_XKRXQA_4Fb0YlZs"><meta name="msvalidate.01" content="2A9EAE6A41044CA61F6FCAD3454E70A6"><meta name="google-tagmanagerId" content="GTM-PZGBHQI"><script>
(function(w,d,s,l,i){w[l]=w[l]||[];w[l].push({'gtm.start':new Date().getTime(),event:'gtm.js'});
window.pageData = {}
navigation: {},\n
customer:
```

## 2. Beautifying the html code:



```
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In [4]: Soup = BeautifulSoup(data,"html.parser")
        Soup.prettify
        print(Soup)

<!DOCTYPE html>
<html lang="en"><head><meta charset="utf-8"><meta content="width=device-width, initial-scale=1, maximum-scale=1" name="viewport"><link href="https://in.puma.com/in/en/outlet" rel="canonical"><link href="/assets/apple-touch-icon-57x57.png" rel="apple-touch-icon-precomposed" sizes="57x57"><link href="/assets/apple-touch-icon-60x60.png" rel="apple-touch-icon-precomposed" sizes="60x60"><link href="/assets/apple-touch-icon-72x72.png" rel="apple-touch-icon-precomposed" sizes="72x72"><link href="/assets/apple-touch-icon-76x76.png" rel="apple-touch-icon-precomposed" sizes="76x76"><link href="/assets/apple-touch-icon-114x114.png" rel="apple-touch-icon-precomposed" sizes="114x114"><link href="/assets/apple-touch-icon-120x120.png" rel="apple-touch-icon-precomposed" sizes="120x120"><link href="/assets/apple-touch-icon-144x144.png" rel="apple-touch-icon-precomposed" sizes="144x144"><link href="/assets/apple-touch-icon-152x152.png" rel="apple-touch-icon-precomposed" sizes="152x152"><link href="/assets/android-chrome-192x192.png" rel="icon" sizes="192x192" type="image/png"><link href="/assets/android-chrome-512x512.png" rel="icon" sizes="512x512" type="image/png"><link href="/assets/favicon-48x48.png" rel="icon" sizes="48x48" type="image/png"><meta content="" name="application-name"><meta content="#FFFFFF" name="msapplication-TileColor"><meta content="/assets/mstile-144x144.png" name="msapplication-TileImage"><meta content="/assets/mstile-70x70.png" name="msapplication-square70x70logo"><meta content="/assets/mstile-150x150.png" name="msapplication-square150x150logo"><meta content="/assets/mstile-310x150.png" name="msapplication-wide310x150logo"><meta content="/assets/mstile-310x310.png" name="msapplication-square310x310logo"><meta content="j-mSdyEVDu6NlkkmeXX002Q0i_XKRXQA_4Fb0YlZs" name="google-site-verification"><meta content="2A9EAE6A41044CA61F6FCAD3454E70A6" name="msvalidate.01"><meta content="GTM-PZGBHQI" name="google-tagmanagerId"><script>
(function(w,d,s,l,i){w[l]=w[l]||[];w[l].push({'gtm.start':new Date().getTime(),event:'gtm.js'});
window.pageData = {
}
```

**3. Product name of puma shoes:**

```
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In [36]: product_name = []
         for i in range(0,len(names)):
             product_name.append(names[i].get_text())
         product_name

Out[36]: ['RS-X Toys Unisex SneakersPuma White-Puma Royal-High Risk Red',
         'RS-X Toys Unisex SneakersHigh Rise-Puma White',
         'RS-X Toys Unisex SneakersPuma White-High Risk Red',
         'Mercedes AMG Petronas F1 X-Ray Speed Unisex SneakersPUMA Black-Spectra Green-PUMA White',
         'Ferrari Drift Cat Delta Unisex SneakersPuma Black-Rosso Corsa',
         'Ferrari Drift Cat Delta Unisex SneakersRosso Corsa-Puma Black',
         'Ferrari Drift Cat Delta Unisex SneakersPuma White-Rosso Corsa',
         'Disperse XT 2 Off-Season Men's Training ShoesPuma Black-Burnt Red',
         'Disperse XT 2 Off-Season Men's Training ShoesCASTLEROCK-Puma Black',
         'Mercedes AMG Petronas F1 Tiburion Unisex SneakersPUMA White-Spectra Green-PUMA Black',
         'Mercedes AMG Petronas F1 Tiburion Unisex SneakersPUMA Black-PUMA White',
         'Mercedes AMG Petronas F1 Tiburion Unisex SneakersPUMA Black-Spectra Green-PUMA Black',
         'Emergence Men's Running ShoesPascalot-Puma White',
         'Emergence Men's Running ShoesPuma Black-Puma White',
         'Retaliante 2 Unisex Running ShoesDark Denim-Puma White',
         'Retaliante 2 Unisex Running ShoesPuma Black-Puma White',
         'Retaliante 2 Unisex Running ShoesRhubarb-Puma Black',
         'Retaliante 2 Unisex Running ShoesCASTLEROCK-Puma White',
         'Game Women's SneakersDusty Orchid-PUMA White',
         'Game Women's SneakersPuma Black-Peach Parfait-Puma White',
         'Game Women's SneakersQuarry-Peony',
         'Clasp Men's SneakersDark Shadow-Puma White',
         'Redon Move Unisex Sneakersblack-white-high risk red',
         'PUMA x one8 Premium Unisex WalletPuma Black']

In [38]: pricesSoup.find_all(class_='whitespace-normal text-base line-through opacity-50 override:text-puma-black-300 override:opacity-100')
         print(price)
         <div class="whitespace-normal text-base line-through opacity-50 override:text-puma-black-300 override:opacity-100" data-test-id="price">¥10,999/</div>
         <div class="whitespace-normal text-base line-through opacity-50 override:text-puma-black-300 override:opacity-100" data-test-id="price">¥9,999/</div>
         <div class="whitespace-normal text-base line-through opacity-50 override:text-puma-black-300 override:opacity-100" data-test-id="price">¥9,999/</div>
         <div class="whitespace-normal text-base line-through opacity-50 override:text-puma-black-300 override:opacity-100" data-test-id="price">¥9,999/</div>
```

**4. Original price of product:**

[illegible]



## 5. Discount price of product:

```
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In [50]: disc_price=[]
for i in range(0,len(discount_price)):
    disc_price.append(discount_price[i].get_text())
print(disc_price)

['¥6,599', '¥5,199', '¥4,999', '¥6,299', '¥4,559', '¥4,399', '¥3,899', '¥4,219', '¥5,199', '¥5,999', '¥3,849', '¥3,569', '¥2,999', '¥3,249', '¥2,999', '¥2,999', '¥3,009', '¥3,009', '¥3,009', '¥2,919', '¥3,019', '¥1,249']

In [20]: percentageSoup.find_all(class_="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]")
print(percentage)

[<span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">48%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">48%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">50%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">30%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">43%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">43%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">45%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">40%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">35%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">35%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">25%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">30%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">40%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">40%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">30%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">35%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">45%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">45%/span>, <span class="min-w-content tw-lghqvvy tw-noc910 absolute top-0 left-0 z-[5]" data-test-id="product-badge-sale" data-uds-child="badge">50%/span>]
```

## 6. Discount percentage of product:

```
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In [54]: Dsc_Per=[]
for i in range(0,len(percentage)):
    Dsc_Per.append(percentage[i].get_text())
print(Dsc_Per)

['-40%', '-48%', '-50%', '-30%', '-43%', '-43%', '-45%', '-40%', '-35%', '-35%', '-25%', '-30%', '-35%', '-40%', '-35%', '-40%', '-30%', '-30%', '-30%', '-35%', '-45%', '-50%']

In [56]: df=pd.DataFrame({"product name":product_name,"Original price":ori_price,"Discounted price":disc_price,"Discount percentage":Dsc_Per})
print(df)

product name Original price \
0 RS-X Toys Unisex SneakersPuma White-Puma Royal... ¥10,999
1 RS-X Toys Unisex SneakersHigh Rise-Puma White ¥9,999
2 RS-X Toys Unisex SneakersPuma White-High Risk Red ¥9,999
3 Mercedes AMG Petronas F1 X-Ray Speed Unisex Sn... ¥8,999
4 Ferrari Drift Cat Delta Unisex SneakersPuma Bl... ¥7,999
5 Ferrari Drift Cat Delta Unisex SneakersRosso C... ¥7,999
6 Ferrari Drift Cat Delta Unisex SneakersPuma Wh... ¥7,999
7 Disperse XT 2 Off-Season Men's Training ShoesP... ¥6,499
8 Disperse XT 2 Off-Season Men's Training ShoesC... ¥6,499
9 Mercedes AMG Petronas F1 Tiburion Unisex Sneak... ¥7,999
10 Mercedes AMG Petronas F1 Tiburion Unisex Sneak... ¥7,999
11 Mercedes AMG Petronas F1 Tiburion Unisex Sneak... ¥7,999
12 Emergence Men's Running ShoesPeacoat-Puma White ¥5,499
13 Emergence Men's Running ShoesPuma Black-Puma W... ¥5,499
14 Retaliante 2 Unisex Running ShoesDark Denim-Pum... ¥4,999
15 Retaliante 2 Unisex Running ShoesPuma Black-Pum... ¥4,999
16 Retaliante 2 Unisex Running ShoesRhubarb-Puma B... ¥4,999
17 Retaliante 2 Unisex Running ShoesCASTLEROCK-Pum... ¥4,999
18 Game Women's SneakersDusty Orchid-PUMA White ¥4,299
19 Game Women's SneakersPuma Black-Peach Parfait-... ¥4,299
20 Game Women's SneakersQuarry-Peony ¥4,299
21 Clasp Men's SneakersDark Shadow-Puma White ¥4,499
22 Redon Move Unisex Sneakersblack-white-high ris... ¥5,499
23 PUMA x one8 Premium Unisex WalletPuma Black ¥2,499
```

## 7. Converting collected data into tabular format using pandas library:

```
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```

```
In [56]: df=pd.DataFrame({'product name':product_name,"Original price":ori_price,"Discounted price":disc_price,"Discount percentage":Dsc_f
print(df)
```

	product name	Original price	Discounted price	Discount percentage
0	RS-X Toys Unisex SneakersPuma White-Puma Royal...	₹10,999	₹6,599	-40%
1	RS-X Toys Unisex SneakersHigh Rise-Puma White	₹9,999	₹5,199	-48%
2	RS-X Toys Unisex SneakersPuma White-High Risk Red	₹9,999	₹4,999	-50%
3	Mercedes AMG Petronas F1 X-Ray Speed Unisex Sn...	₹8,999	₹6,299	-30%
4	Ferrari Drift Cat Delta Unisex SneakersPuma Bl...	₹7,999	₹4,559	-43%
5	Ferrari Drift Cat Delta Unisex SneakersRosso C...	₹7,999	₹4,559	-43%
6	Ferrari Drift Cat Delta Unisex SneakersPuma Wh...	₹7,999	₹4,399	-45%
7	Disperse XT 2 Off-Season Men's Training ShoesP...	₹6,499	₹3,899	-40%
8	Disperse XT 2 Off-Season Men's Training ShoesC...	₹6,499	₹4,219	-35%
9	Mercedes AMG Petronas F1 Tiburion Unisex Sneak...	₹7,999	₹5,199	-35%
10	Mercedes AMG Petronas F1 Tiburion Unisex Sneak...	₹7,999	₹5,199	-35%
11	Mercedes AMG Petronas F1 Tiburion Unisex Sneak...	₹7,999	₹5,999	-25%
12	Emergence Men's Running ShoesPeacoat-Puma White	₹5,499	₹3,849	-30%
13	Emergence Men's Running ShoesPuma Black-Puma W...	₹5,499	₹3,569	-35%
14	Retaliante 2 Unisex Running ShoesDark Denim-Pum...	₹4,999	₹2,999	-40%
15	Retaliante 2 Unisex Running ShoesPuma Black-Pum...	₹4,999	₹3,249	-35%
16	Retaliante 2 Unisex Running ShoesRhubarb-Puma B...	₹4,999	₹2,999	-40%
17	Retaliante 2 Unisex Running ShoesCASTLEROCK-Pum...	₹4,999	₹2,999	-40%
18	Game Women's SneakersDusty Orchid-PUMA White	₹4,299	₹3,009	-30%
19	Game Women's SneakersPuma Black-Peach Parfait...	₹4,299	₹3,009	-30%
20	Game Women's SneakersQuarry-Peony	₹4,299		
21	Clasp Men's SneakersDark Shadow-Puma White	₹4,499		
22	Redon Move Unisex Sneakersblack-white-high ris...	₹5,499		
23	PUMA x one8 Premium Unisex HalletPuma Black	₹2,499		

## 8. Saving the tabulated data into cvs format and opening the file:

```
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```

```
In [23]: import os
os.getcwd()
df.to_csv("puma_shoes.csv",index=False)
a=pd.read_csv("puma_shoes.csv")
a
```

	product name	Original price	Discounted price	Discount percentage
0	RS-X Toys Unisex SneakersPuma White-Puma Royal...	₹10,999	₹6,599	-40%
1	RS-X Toys Unisex SneakersHigh Rise-Puma White	₹9,999	₹5,199	-48%
2	RS-X Toys Unisex SneakersPuma White-High Risk Red	₹9,999	₹4,999	-50%
3	Mercedes AMG Petronas F1 X-Ray Speed Unisex Sn...	₹8,999	₹6,299	-30%
4	Mercedes AMG Petronas F1 X-Ray Speed Unisex Sn...	₹8,999	₹6,299	-30%
5	Ferrari Drift Cat Delta Unisex SneakersPuma Bl...	₹7,999	₹4,559	-43%
6	Ferrari Drift Cat Delta Unisex SneakersRosso C...	₹7,999	₹4,559	-43%
7	Ferrari Drift Cat Delta Unisex SneakersPuma Wh...	₹7,999	₹4,399	-45%
8	Disperse XT 2 Off-Season Men's Training ShoesP...	₹6,499	₹3,899	-40%
9	Disperse XT 2 Off-Season Men's Training ShoesC...	₹6,499	₹4,219	-35%
10	Mercedes AMG Petronas F1 Tiburion Unisex Sneak...	₹7,999	₹5,199	-35%
11	Mercedes AMG Petronas F1 Tiburion Unisex Sneak...	₹7,999	₹5,199	-35%
12	Mercedes AMG Petronas F1 Tiburion Unisex Sneak...	₹7,999	₹5,999	-25%
13	Emergence Men's Running ShoesPeacoat-Puma White	₹5,499	₹3,849	-30%
14	Emergence Men's Running ShoesPuma Black-Puma W...	₹5,499	₹3,569	-35%
15	Retaliante 2 Unisex Running ShoesDark Denim-Pum...	₹4,999	₹2,999	-40%
16	Retaliante 2 Unisex Running ShoesPuma Black-Pum...	₹4,999	₹3,249	-35%
17	Retaliante 2 Unisex Running ShoesRhubarb-Puma B...	₹4,999	₹2,999	-40%
18	Retaliante 2 Unisex Running ShoesCASTLEROCK-Pum...	₹4,999	₹2,999	-40%
19	Game Women's SneakersDusty Orchid-PUMA White	₹4,299	₹3,009	-30%
20	Game Women's SneakersPuma Black-Peach Parfait...	₹4,299	₹3,009	-30%



## **Conclusion:**

*As we commemorate the one-year anniversary of Puma Shoes, we extend our sincerest gratitude to our valued customers who have made this journey exceptional. To express our appreciation, we are thrilled to unveil an exclusive anniversary offer—a generous 35 to 50% discount on all Puma shoe purchases. This celebration is not just about a year gone by, but a step forward into many more stylish and comfortable strides together. We invite you to indulge in this limited-time offer as a token of our thanks, making every pair of Puma shoes not just footwear, but a testament to the shared journey of fashion, innovation, and the joy of walking in style. Here's to stepping into the future with you! 🎉👟*

**Thank you...**