

3. Implement a program for feature extraction in 2D color images (any features like color, texture etc. and to extract features from input image and plot histogram for the features.

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In [1]: import requests
        from bs4 import BeautifulSoup
```

```
In [2]: headers = {'User-Agent': 'Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/80.0.3987.163 Safari/537.36'}

request = requests.get("https://www.amazon.in/s?k=mobile+phone+under+20000&c")
# print(request)
# print(request.content)
```

```
In [3]: soup = BeautifulSoup(request.content, 'html.parser')
        # print(soup.prettify())

        products = []

        product_elements = soup.select('.s-main-slot .s-result-item')
```

```
In [4]: for product in product_elements:
        title = product.select_one('h2 a span').get_text(strip=True) if product.select_one('h2 a span') else ''
        price = product.select_one('.a-price').get_text(strip=True).strip() if product.select_one('.a-price') else ''

        products.append({
            'title': title,
            'price': price
        })
```

```
In [5]: for product in products:
        print(f"Title: {product['title']} \nPrice: {product['price']}\n\n")
```

Title: no Title
Price: ₹15,999₹15,999

Title: no Title
Price: No price

Title: Redmi 13 5G, Black Diamond, 8GB+128GB | India Debut SD 4 Gen 2 AE | 108MP Pro Grade Camera | 6.79in Largest Display in Segment
Price: ₹14,999₹14,999

Title: iQOO Z9 5G (Graphene Blue, 8GB RAM, 128GB Storage) | Dimensity 7200 5G Processor | Sony IMX882 OIS Camera | 120Hz AMOLED with 1800 nits Local Peak Brightness | 44W Charger in The Box
Price: ₹18,499₹18,499

Title: OnePlus Nord CE4 Lite 5G (Super Silver, 8GB RAM, 128GB Storage)
Price: ₹19,998₹19,998

Title: Motorola G64 5G (Ice Lilac, 12GB RAM, 256GB Storage) | Expandable Upto 2TB | Upto 24GB RAM with RAM Boost | 50MP (OIS) + 8MP | 16MP Front Camera | MediaTek Dimensity 7025 Processor | 6000 mAh Battery
Price: ₹17,390₹17,390

Title: OnePlus Nord CE 3 Lite 5G (Chromatic Gray, 8GB RAM, 256GB Storage)
Price: ₹19,999₹19,999

Title: Tecno POVA 6 NEO 5G (Aurora Cloud, 8GB+256GB) | Advanced AI Features | 108MP Ultra Clear AI Camera | D6300 Powerful Processor | 5 Year Lag Free Fluency | 5000 mAh Battery | in Built Infrared and NFC
Price: ₹13,999₹13,999

Title: Tecno POVA 6 NEO 5G (Aurora Cloud, 8GB+256GB) | Advanced AI Features | 108MP Ultra Clear AI Camera | D6300 Powerful Processor | 5 Year Lag Free Fluency | 5000 mAh Battery | in Built Infrared and NFC
Price: ₹13,999₹13,999

Title: iQOO Z9 5G (Brushed Green, 8GB RAM, 128GB Storage) | Dimensity 7200 5G Processor | Sony IMX882 OIS Camera | 120Hz AMOLED with 1800 nits Local Peak Brightness | 44W Charger in The Box
Price: ₹18,499₹18,499

Title: Samsung Galaxy M15 5G Prime Edition (Blue Topaz, 6GB RAM, 128GB Storage) | Super AMOLED Display | 50MP Triple Cam | 6000mAh Battery | MediaTek Dimensity 6100+ | 4 Gen. OS Upgrade & 5 Year Security Update
Price: ₹11,999₹11,999

Title: iQOO Z9s Pro 5G (Flamboyant Orange, 8GB RAM, 128GB Storage) | Snapdragon 7 Gen 3 Processor | 120 Hz Curved AMOLED Display with 4500 nits Local Peak Brightness | 5500 mAh Battery | AI Erase
Price: ₹24,998₹24,998

Title: Redmi 13 5G, Hawaiian Blue, 6GB+128GB | India Debut SD 4 Gen 2 AE | 108MP Pro Grade Camera | 6.79in Largest Display in Segment
Price: ₹13,499₹13,499

Title: no Title
Price: No price

Title: OnePlus Nord CE 3 Lite 5G (Chromatic Gray, 8GB RAM, 128GB Storage)
Price: ₹15,999₹15,999

Title: realme NARZO 70x 5G (Forest Green, 8GB RAM, 128GB Storage) | 120Hz Ultra Smooth Display | Dimensity 6100+ 6nm 5G | 50MP AI Camera | 45W Charger in The Box
Price: ₹13,499₹13,499

Title: Redmi Note 13 5G (Arctic White, 12GB RAM, 256GB Storage) | 5G Ready | 120Hz Bezel-Less AMOLED | 7.1mm Slimmest Note Ever | 108MP Pro-Grade Camera
Price: ₹18,999₹18,999

Title: realme NARZO 70x 5G (Ice Blue, 6GB RAM, 128GB Storage) | 120Hz Ultra Smooth Display | Dimensity 6100+ 6nm 5G | 50MP AI Camera | 45W Charger in The Box
Price: ₹12,499₹12,499

Title: realme NARZO 70 Pro 5G (Glass Green, 8GB RAM, 128GB Storage) | Dimensity 7050 5G Chipset | Horizon Glass Design | Segment 1st Flagship Sony IMX890 OIS Camera
Price: ₹16,248₹16,248

Title: iQOO Z9s Pro 5G (Flamboyant Orange, 12GB RAM, 256GB Storage) | Snapdragon 7 Gen 3 Processor | 120 Hz Curved AMOLED Display with 4500 nits Local Peak Brightness | 5500 mAh Battery | AI Erase
Price: ₹28,998₹28,998

Title: Tecno POVA 6 NEO 5G (Aurora Cloud, 8GB+256GB) | Advanced AI Features | 108MP Ultra Clear AI Camera | D6300 Powerful Processor | 5 Year Lag Free Fluency | 5000 mAh Battery | in Built Infrared and NFC
Price: ₹13,999₹13,999

Title: no Title
Price: No price

Title: OnePlus Nord CE4 Lite 5G (Ultra Orange, 8GB RAM, 128GB Storage)
Price: ₹19,998₹19,998

Title: Samsung Galaxy M55s 5G (Thunder Black,8GB RAM,128GB Storage) | 50MP Triple Cam| 5000mAh Battery| Snapdragon 7 Gen 1 | 4 Gen. OS Upgrade & 5 Year Security Update| Super AMOLED+ Display| Without Charger
Price: ₹17,999₹17,999

Title: realme NARZO N61 (Marble Black,6GB RAM+128GB Storage) 90Hz Eye Comfort Display | IP54 Dust & Water Resistance | 48-Month Fluency | Charger in The Box
Price: ₹8,498₹8,498

Title: Samsung Galaxy M15 5G Prime Edition (Blue Topaz,6GB RAM,128GB Storage) | Super AMOLED Display| 50MP Triple Cam| 6000mAh Battery| MediaTek Dimensity 6100+ | 4 Gen. OS Upgrade & 5 Year Security Update
Price: ₹11,999₹11,999

Title: Samsung Galaxy M35 5G (Thunder Grey,6GB RAM,128GB Storage)| Corning Gorilla Glass Victus+| AnTuTu Score 595K+ | Vapour Cooling Chamber | 6000mAh Battery | 120Hz Super AMOLED Display| Without Charger
Price: ₹14,999₹14,999

Title: Samsung Galaxy M15 5G Prime Edition (Celestial Blue,6GB RAM,128GB Storage)| Super AMOLED Display| 50MP Triple Cam| 6000mAh Battery| MediaTek Dimensity 6100+| 4 Gen. OS Upgrade & 5 Year Security Update
Price: ₹11,999₹11,999

Title: POCO X6 5G (Snowstorm White, 12 GB RAM 256 GB Storage)
Price: ₹17,999₹17,999

Title: Samsung Galaxy M55s 5G (Coral Green,8GB RAM,128GB Storage) | 50MP Triple Cam| 5000mAh Battery| Snapdragon 7 Gen 1 | 4 Gen. OS Upgrade & 5 Year Security Update| Super AMOLED+ Display| Without Charger
Price: ₹17,999₹17,999

Title: Lava Blaze Curve 5G (Glass Iron, 8GB LPDDR5 RAM, UFS 3.1 256GB Storage) | 120Hz Curved Amoled Display | 2.6GHz Dimensity 7050 6nm Processor | 64 MP Primary Sensor
Price: ₹16,499₹16,499

Title: Redmi Note 13 5G (Chromatic Purple, 6GB RAM, 128GB Storage)
Price: ₹14,178₹14,178

Title: no Title
Price: No price

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