mini-project-big-basket-1

July 31, 2025

```python
[78]: import pandas as pd
      import numpy as np
      import seaborn as sns
      import matplotlib.pyplot as plt
```

```python
[80]: pwd
```

```python
[80]: 'C:\\Users\\admin'
```

```python
[82]: df = pd.read_csv(r"C:\Users\admin\Downloads\BigBasket Products.csv")
```

```python
[83]: df
```

```python
[83]:        index                                          product  \
      0          1          Garlic Oil - Vegetarian Capsule 500 mg
      1          2                            Water Bottle - Orange
      2          3                       Brass Angle Deep - Plain, No.2
      3          4      Cereal Flip Lid Container/Storage Jar - Assort…
      4          5                   Creme Soft Soap - For Hands & Body
      …        …                                              …
      27550  27551          Wottagirl! Perfume Spray - Heaven, Classic
      27551  27552                                          Rosemary
      27552  27553                     Peri-Peri Sweet Potato Chips
      27553  27554                          Green Tea - Pure Original
      27554  27555                   United Dreams Go Far Deodorant

                        category            sub_category  \
      0           Beauty & Hygiene                Hair Care
      1        Kitchen, Garden & Pets   Storage & Accessories
      2         Cleaning & Household              Pooja Needs
      3         Cleaning & Household    Bins & Bathroom Ware
      4           Beauty & Hygiene         Bath & Hand Wash
      …                …                            …
      27550       Beauty & Hygiene         Fragrances & Deos
      27551    Gourmet & World Food    Cooking & Baking Needs
      27552    Gourmet & World Food   Snacks, Dry Fruits, Nuts
      27553             Beverages                        Tea
```

```
27554        Beauty & Hygiene              Men's Grooming
```

```
                           brand  sale_price  market_price  \
0                 Sri Sri Ayurveda      220.00        220.0
1                       Mastercook      180.00        180.0
2                              Trm      119.00        250.0
3                           Nakoda      149.00        176.0
4                            Nivea      162.00        162.0
...                            ...         ...          ...
27550                        Layerr      199.20        249.0
27551                      Puramate       67.50         75.0
27552                        FabBox      200.00        200.0
27553                        Tetley      396.00        495.0
27554  United Colors Of Benetton      214.53        390.0
```

```
                             type  rating  \
0                  Hair Oil & Serum     4.1
1            Water & Fridge Bottles     2.3
2                 Lamp & Lamp Oil     3.4
3         Laundry, Storage Baskets     3.7
4             Bathing Bars & Soaps     4.4
...                           ...     ...
27550                      Perfume     3.9
27551   Herbs, Seasonings & Rubs     4.0
27552              Nachos & Chips     3.8
27553                    Tea Bags     4.2
27554          Men's Deodorants     4.5
```

```
                                        description
0         This Product contains Garlic Oil that is known…
1         Each product is microwave safe (without lid), …
2         A perfect gift for all occasions, be it your m…
3         Multipurpose container with an attractive desi…
4         Nivea Creme Soft Soap gives your skin the best…
...                                                 …
27550  Layerr brings you Wottagirl Classic fragrant b…
27551  Puramate rosemary is enough to transform a dis…
27552  We have taken the richness of Sweet Potatoes (…
27553  Tetley Green Tea with its refreshing pure, ori…
27554  The new mens fragrance from the United Dreams …
```

```
[27555 rows x 10 columns]
```

Index—Simply the Index

```
[97]: print(df.index)
```

```
RangeIndex(start=0, stop=27555, step=1)
```

product - Title of the product (as they're listed)

```
[105]: print(df['product'].head(40))
```

```
0                  Garlic Oil - Vegetarian Capsule 500 mg
1                                    Water Bottle - Orange
2                                Brass Angle Deep - Plain, No.2
3          Cereal Flip Lid Container/Storage Jar - Assort…
4                          Creme Soft Soap - For Hands & Body
5                          Germ - Removal Multipurpose Wipes
6                                              Multani Mati
7                          Hand Sanitizer - 70% Alcohol Base
8          Biotin & Collagen Volumizing Hair Shampoo + Bi…
9                          Scrub Pad - Anti- Bacterial, Regular
10                              Wheat Grass Powder - Raw
11                          Butter Cookies Gold Collection
12                          Face Wash - Oil Control, Active
13                          Mold & Mildew Remover with Bleach
14                  Just Spray - Mosquito Repellent Room Spray
15                  Dove Plastic Soap Case - Assorted Colour
16                          Smooth Skin Oil - For Dry Skin
17                                          Salted Pumpkin
18                              Flax Seeds - Roasted
19                              Organic Tofu - Soy Paneer
20                  Ceramic Barrel Brush - Colour May Vary
21                  Instant Noodles - Chicken Satay Flavor
22                                              Chia Seeds
23                  Cleanse Green Tea - Whole Leaf Loose Tea
24                                          Veggie Cutter
25          Insulated Hot Fresh Casserole For Roti/Chapati…
26                              Granola - Happy Berries
27                              Flaxseed - Pesticide Free
28                                          Paratha Puff
29                              Lip Butter - Rose
30                          Fruit Power - Masala Sugarcane
31                          Chocobakes Choc Filled Cookies
32                          Amber - Deodorant Body Spray
33                          Green Tea - Tulsi Loose Leaf
34                  Pet Solitaire Container Set - Silver
35                                          Dhania - Dal
36                              Pudina Chutney Masala
37          Bodylicious Deodorant Spray - Mate (For Men)
38                          Sport Deo Spray - Fresh, for Men
39                          Choco Deck - Mini Delights
Name: product, dtype: object
```

```
[ ]:
```

category - Category into which product has been classified

```
[135]: print(df[['product', 'category']].head())
```

```
                                        product              category
0           Garlic Oil - Vegetarian Capsule 500 mg      Beauty & Hygiene
1                             Water Bottle - Orange  Kitchen, Garden & Pets
2                       Brass Angle Deep - Plain, No.2   Cleaning & Household
3  Cereal Flip Lid Container/Storage Jar - Assort…    Cleaning & Household
4                 Creme Soft Soap - For Hands & Body      Beauty & Hygiene
```

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[ ]:
```

sub_category - Subcategory into which product has been kept

```
[137]: print(df[['product', 'sub_category']].head())
```

```
                                        product          sub_category
0           Garlic Oil - Vegetarian Capsule 500 mg            Hair Care
1                             Water Bottle - Orange  Storage & Accessories
2                       Brass Angle Deep - Plain, No.2           Pooja Needs
3  Cereal Flip Lid Container/Storage Jar - Assort…    Bins & Bathroom Ware
4                 Creme Soft Soap - For Hands & Body      Bath & Hand Wash
```

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brand - Brand of the product

```
[139]: print(df[['product', 'brand']].head())
```

```
                                        product             brand
0           Garlic Oil - Vegetarian Capsule 500 mg  Sri Sri Ayurveda
1                             Water Bottle - Orange         Mastercook
2                       Brass Angle Deep - Plain, No.2              Trm
3  Cereal Flip Lid Container/Storage Jar - Assort…           Nakoda
4                 Creme Soft Soap - For Hands & Body            Nivea
```

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[ ]:
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[ ]: sale_price - Price at which product is being sold on the site
```

```
[133]: print(df[['product', 'sale_price']].head())
```

```
                                        product  sale_price
0           Garlic Oil - Vegetarian Capsule 500 mg       220.0
1                             Water Bottle - Orange       180.0
2                       Brass Angle Deep - Plain, No.2       119.0
3  Cereal Flip Lid Container/Storage Jar - Assort…       149.0
4                 Creme Soft Soap - For Hands & Body       162.0
```

```
[ ]:
```

market_price - Market price of the product

```
[127]: print(df[['product', 'sale_price']])
```

```
                                                     product  sale_price
0                       Garlic Oil - Vegetarian Capsule 500 mg      220.00
1                                       Water Bottle - Orange      180.00
2                                 Brass Angle Deep - Plain, No.2      119.00
3             Cereal Flip Lid Container/Storage Jar - Assort…      149.00
4                             Creme Soft Soap - For Hands & Body      162.00
…                                                          …           …
27550             Wottagirl! Perfume Spray - Heaven, Classic      199.20
27551                                               Rosemary       67.50
27552                       Peri-Peri Sweet Potato Chips      200.00
27553                             Green Tea - Pure Original      396.00
27554                     United Dreams Go Far Deodorant      214.53

[27555 rows x 2 columns]
```

```
[ ]:
```

type - Type into which product falls

```
[143]: print(df['type'].value_counts())
```

```
type
Face Care                1508
Ayurveda                  538
Men's Deodorants          500
Shampoo & Conditioner     461
Glassware                 415
                          …
Bagels & Baguette           1
Roses                       1
Marinated Meat              1
Organic Eggs                1
Turkey & Duck               1
Name: count, Length: 426, dtype: int64
```

```
[ ]:
```

rating - Rating the product has got from its consumers

```
[145]: top_rated = df[['product', 'rating']].sort_values(by='rating', ascending=False)
       print(top_rated.head())
```

```
                                      product  rating
8987    Bernard Scot Ice Bucket With Tong & Glasses/Tu…     5.0
8267              Skin-Fit Tablets – Improves Skin Health     5.0
19459           Disposable Face Mask – Melt Blown, 3 Ply     5.0
19447    Caviar Rejuvenate & Protecting Face Mask Sheet     5.0
25246              Adult Dry Dog Food – Chicken & Rice     5.0
```

[ ]:

description - Description of the dataset (in detail)

[ ]:

[ ]:

[ ]:

[ ]:

[ ]: