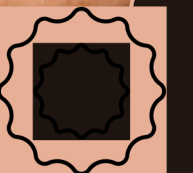
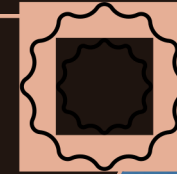


SUNSCREEN

Objective;

Analyzing sunscreen market trends to identify opportunities for launching new product in 2025.”



DATA OVERVIEW

Source: Public product listings & flipkart.

Time frame: January 2024–July 2025

DatasetSize: 315 product records across many brands.

Key Columns:

- Brand Name
- Product Name
- SPF Level
- Price (₹)
- Customer Rating (out of 5)
- Rating

Limitations:

Some missing data for review counts.

Limited offline sales information.



Data Cleaning

- Removed Duplicates: Deleted 152 duplicate product entries.
- Handled Missing Values
- Standardized Formats
- Corrected Data Types
- Filtered Data

Exploratory Data Analysis (EDA)

- Calculated averages, medians, and distributions.
- Identified top-performing brands & trends.

Visualization

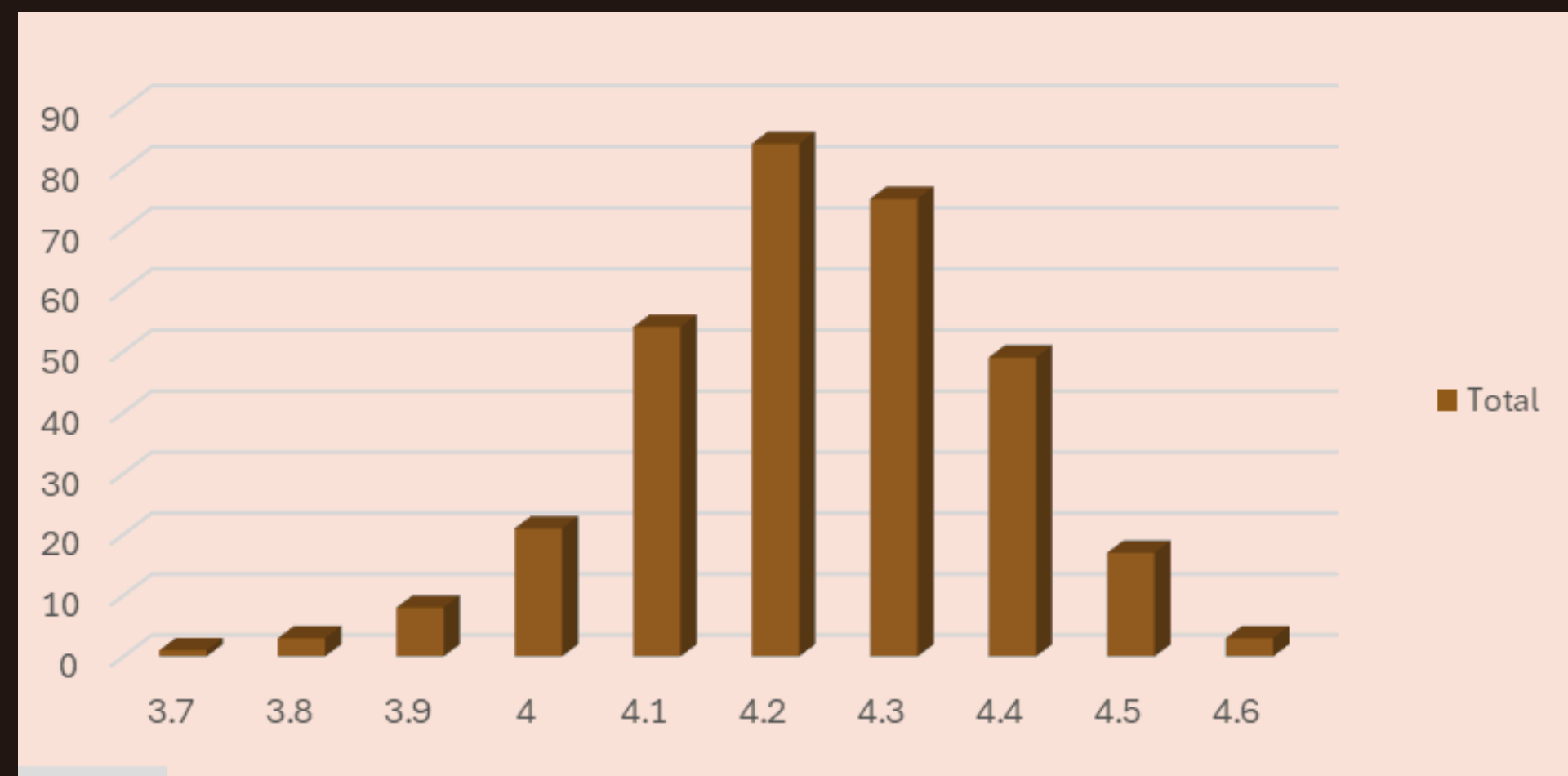
Created bar charts, pie charts, and trend lines for comparison.



Insight:

Most ratings fall between 4.1 – 4.4, showing customers are generally satisfied.
Very few products are rated below 4.0, which means poor-performing products are minimal.

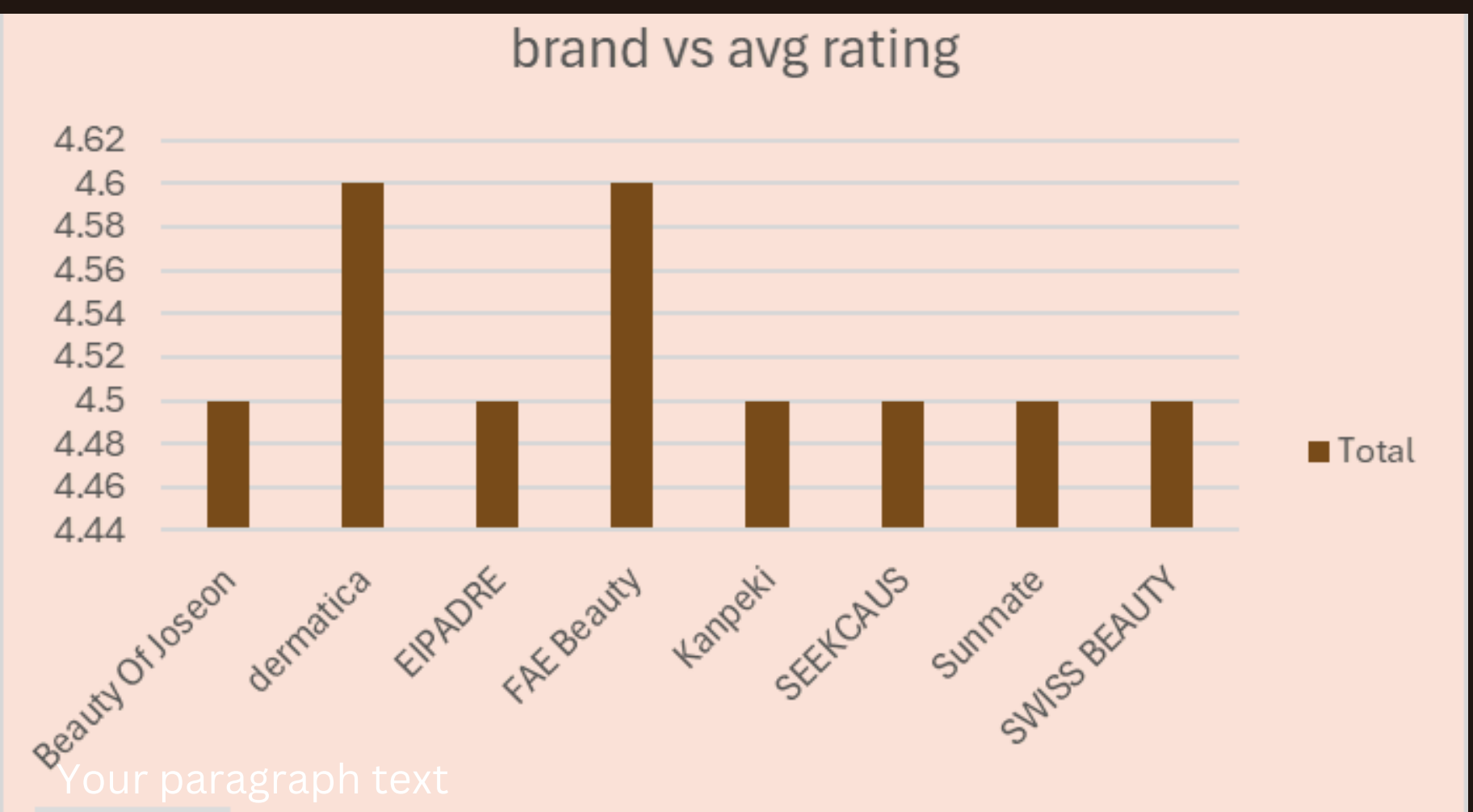
how are product rating are distributed?



which brand have highest rating?

Insight:

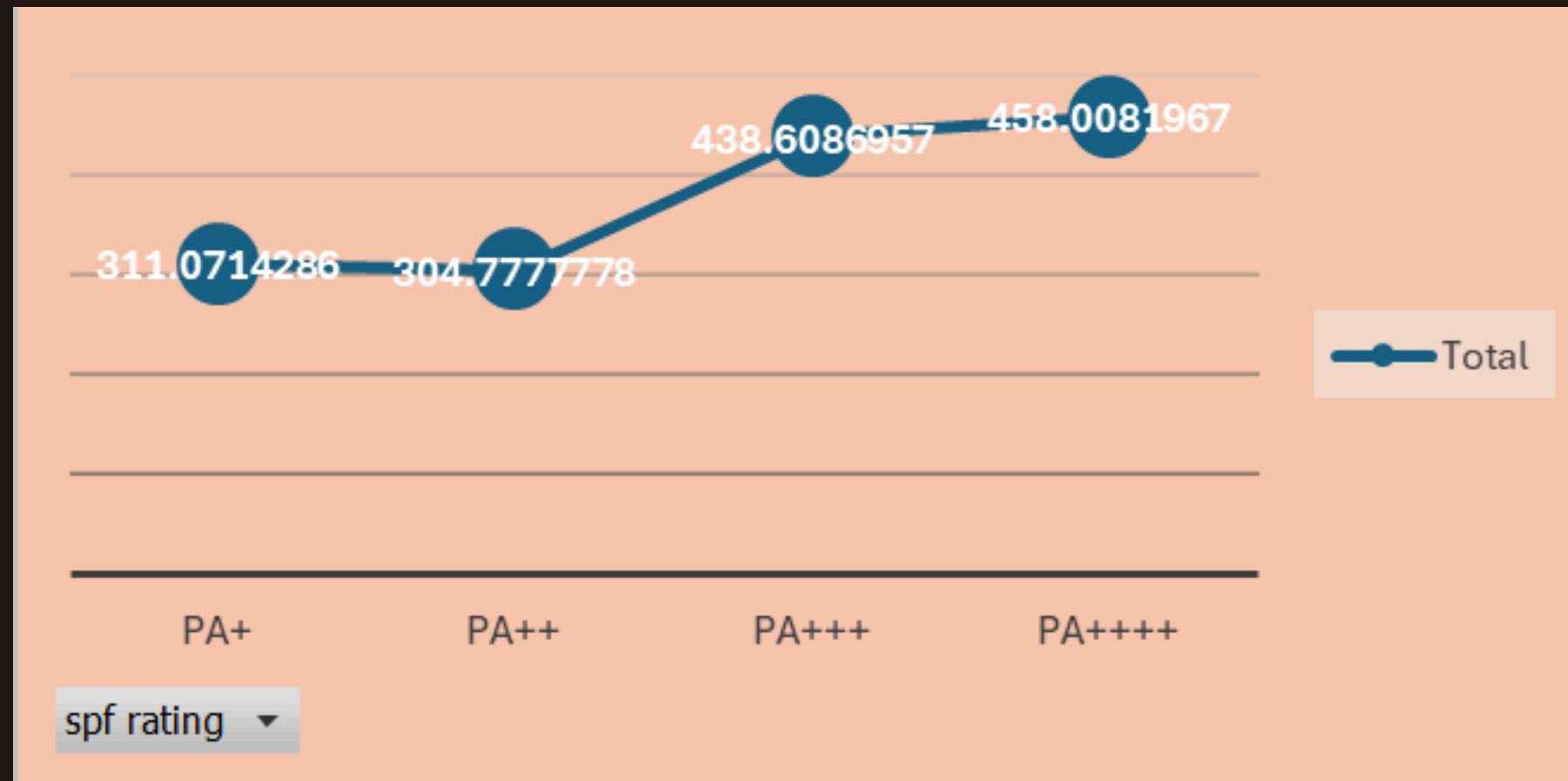
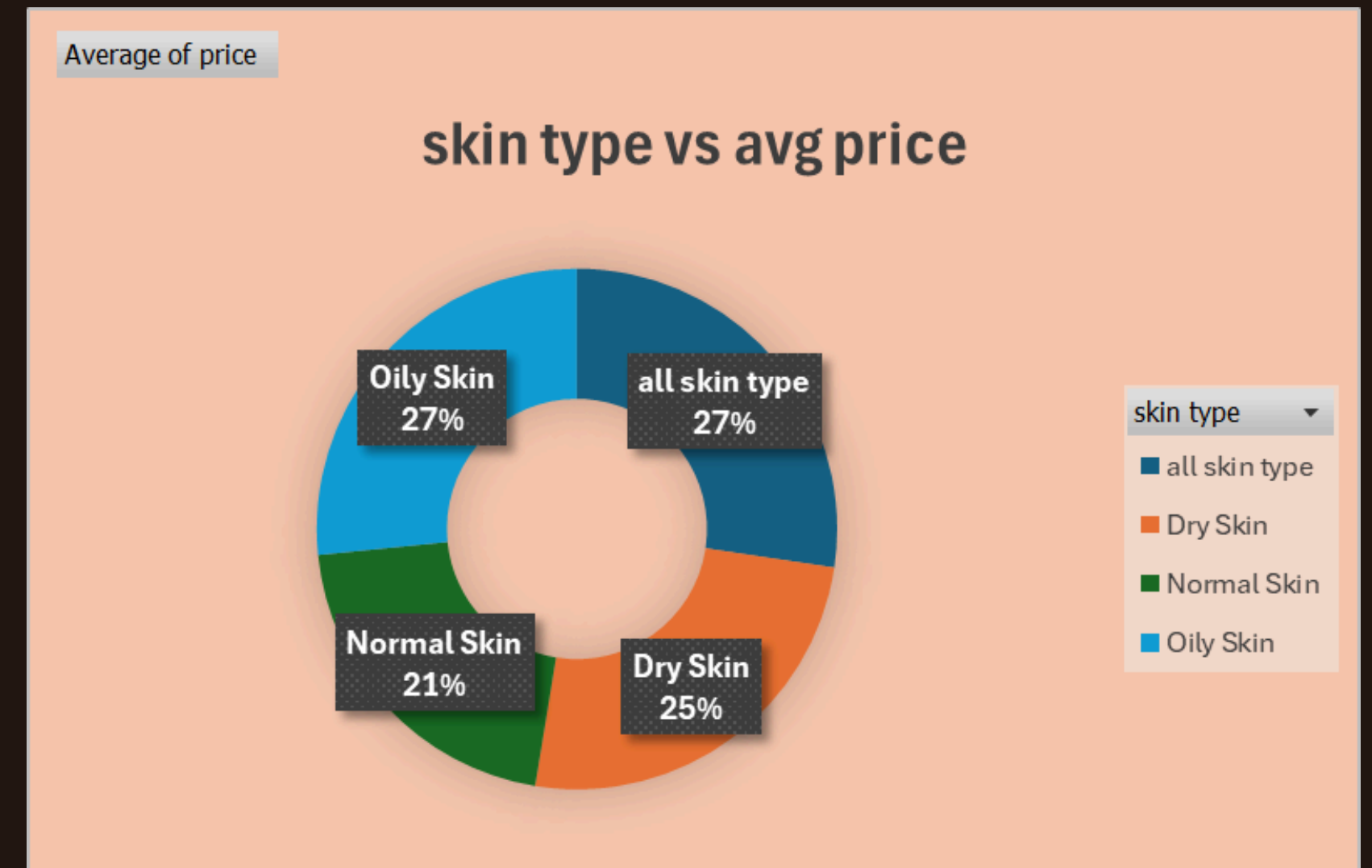
From the bar chart, Dermatica and fae beauty show the highest average ratings (~4.5+).
Brands like SWISS BEAUTY and LAKME are rated lower comparatively.



skin type vs avg price

Insight:

Products for oily skin (27%) and dry skin (25%) are slightly more expensive than normal skin (21%). “All skin type” category dominates (27%) – brands target universality.



what is average price of each spf?

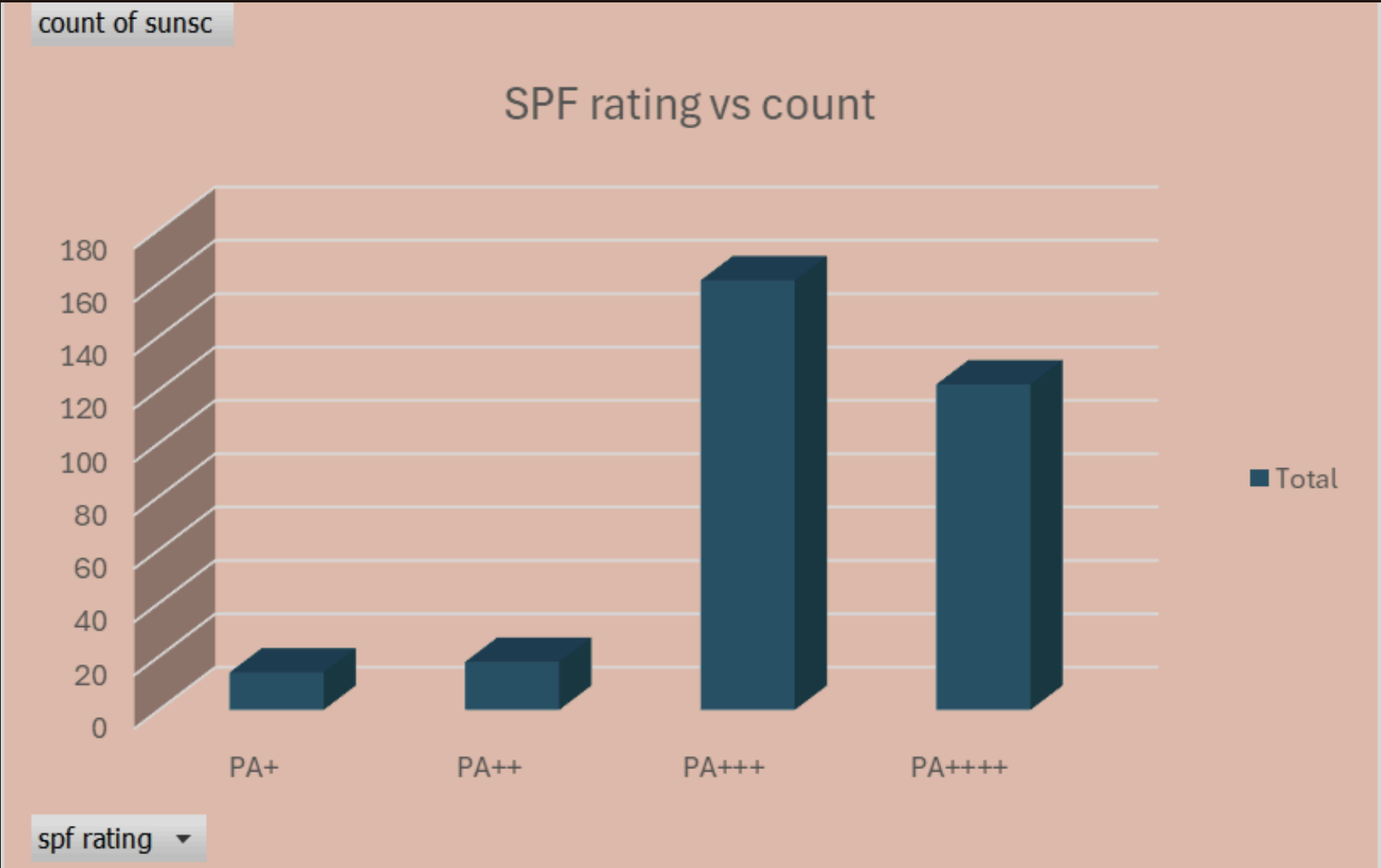
Insight:

Average price rises with SPF protection (PA+ lowest → PA++++ highest). Customers are willing to spend more for higher SPF ratings.

which spf rating are most common?

Insight:

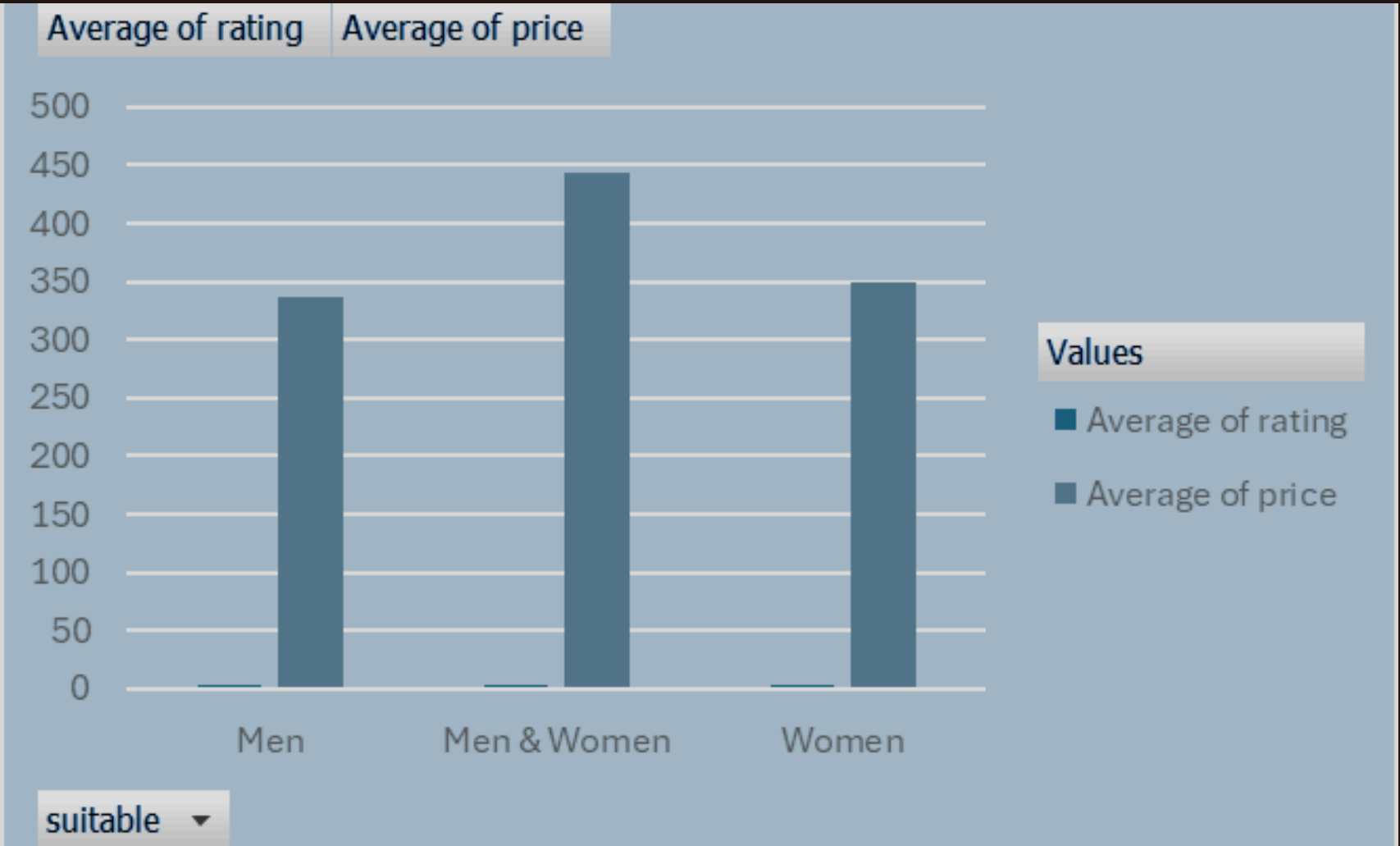
PA+++ is the most common in the dataset, followed by PA++++.
PA+ and PA++ are rarely used.



which category offers the best?

Insight:

Unisex (Men & Women) products have the highest average price (~450+),
suggesting premium positioning.
Women’s products have higher counts but mid-range pricing.
Men’s only category is lowest in price and rating.



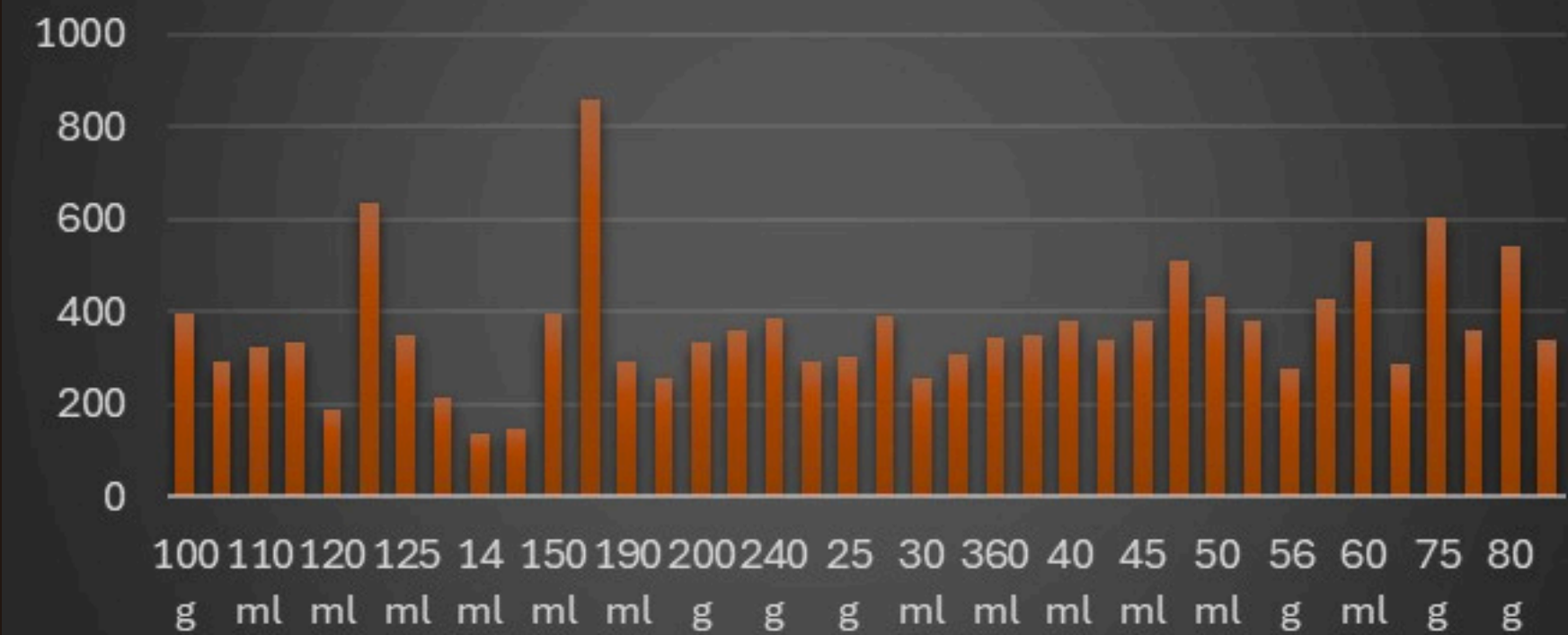
does quantity affect the price ?

Insight:

Larger packs (100ml+) cost more in absolute terms, but per-ml pricing is often cheaper.
Small packs (50ml, 30ml) dominate — linked to affordability and travel needs.

Average of price

quantity vs avg price



quantity ▼

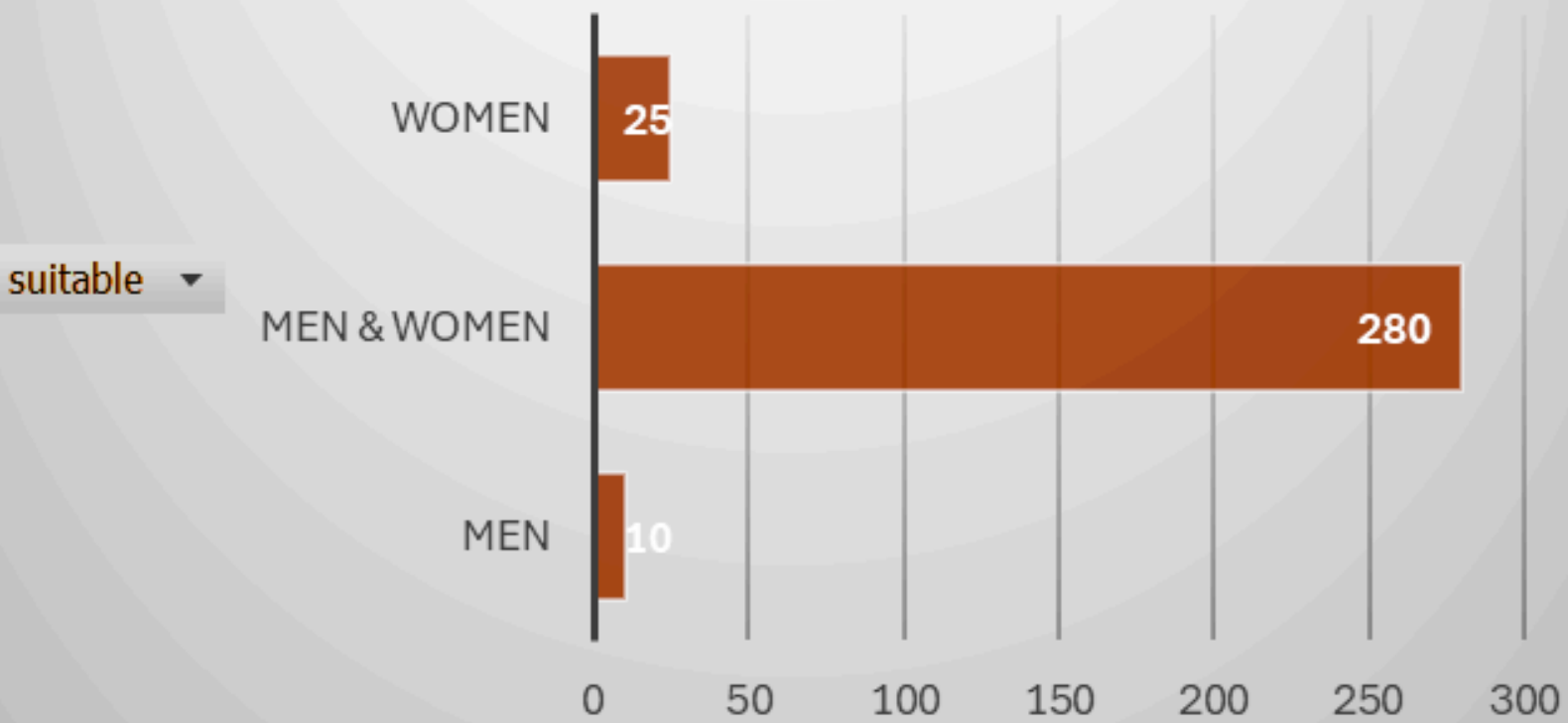
suitable for vs count

Insight:

“Men & Women” (Unisex) dominates (280+ products).
Women-only products are half that.
Men-only products are negligible.

Count of suitable

suitable for vs count



suitable ▼

market trend & insights



price range ;most sc are priced between 200rsAND 800 rs

The avg price around 430-450 rs

product rating ; majority of product have rating between 4.0 and 4.5quality This indicate a competitive quality standards in market

Top brands ; lotus, herbal, biotique ,brinton, deconstruct,etc these brands consistently have multiple products with good ratings .

spf rating ; most popular values are PA++++ and PA++++0 products with PA+++ are dominant, offering sufficient protection.

quantity; common quantities are 50 ml , 100 ml , or 50 gm smaller sizes are popular for affordabilityand travel friendly .

skin type targeting ;majority of products are targeting all skin type -----so this is an oppotunity.

suitability ; majority of sc are targeting unisex (men &women) some brands are targeting women only -possibly for cosmetic design reasons. best value

products ; product price under 400 with a rating above 4.3 are considered as high value . these offer strong competition in budget friendly.

product launch recommendation



price ; Aim for 300rs-450rs to stay competitive but profitable.

spf ; use PA+++ or higher seen as minimum standard in market .

skin type ;focus on oily skin type,allskintype.

quantity ;launch with 50ml or60mlstarter size ;add 100 ml varient later.

rating focus; dermatologist -tested,lightweight non-sticky feel.

online sales ; target platform like amazon, flipkart,nykaa for distribution.

🧴 Sunscreen Dataset Summary

📌 General Stats

Average Price: ₹464

Price Range: ₹208 – ₹765

Average Customer Rating: 4.2 / 5

Most Common Quantity Sold: 50 ml

Most Common SPF Rating: PA+++

🏷 Popular Product Attributes

Most Common Skin Type: All skin type

Most Common Target Audience: Men & Women

Most Frequent Brand: BIOTIQUE

★ Top 3 Highest-Rated Sunscreens

Hana Beauty Sunscreen — ₹224 — Rating: 4.5 — SPF: PA++++

Brinton Sunscreen — ₹765 — Rating: 4.3 — SPF: PA+++

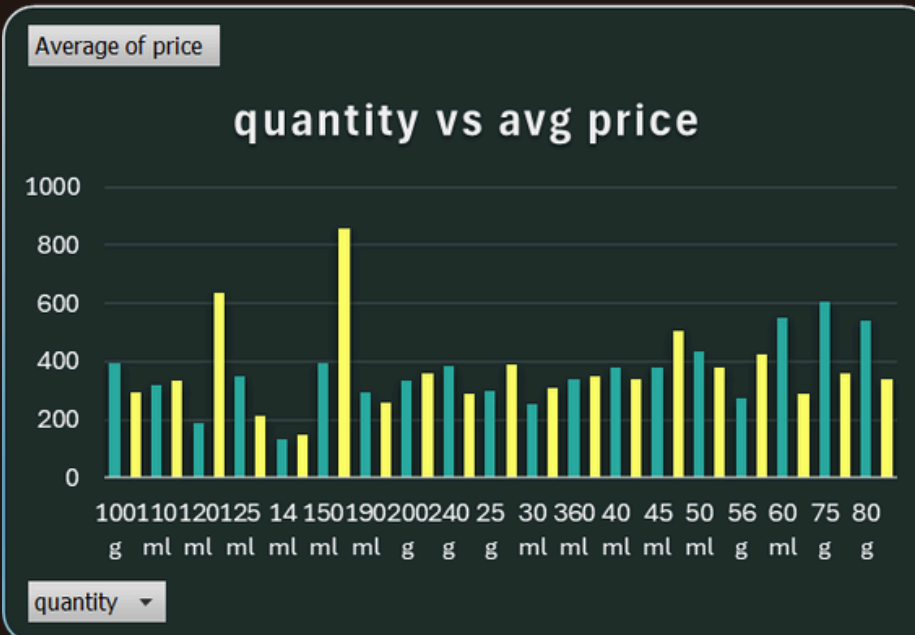
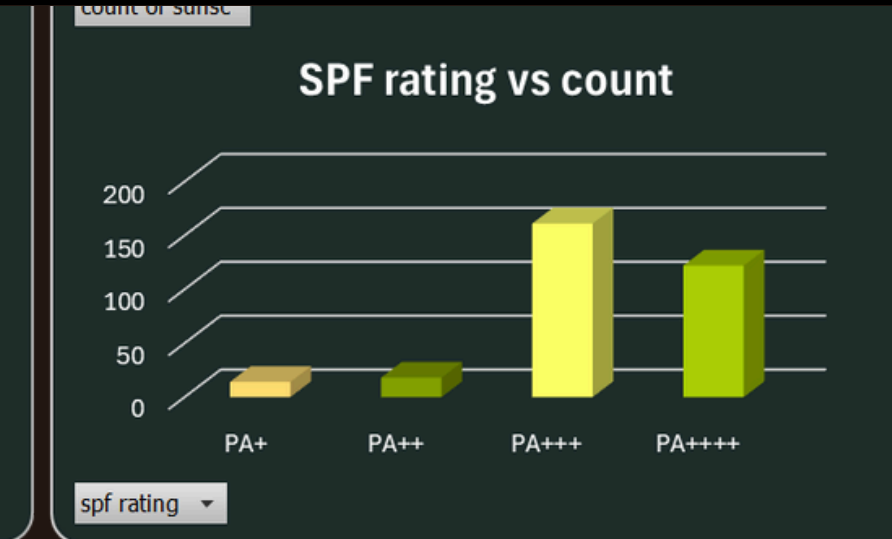
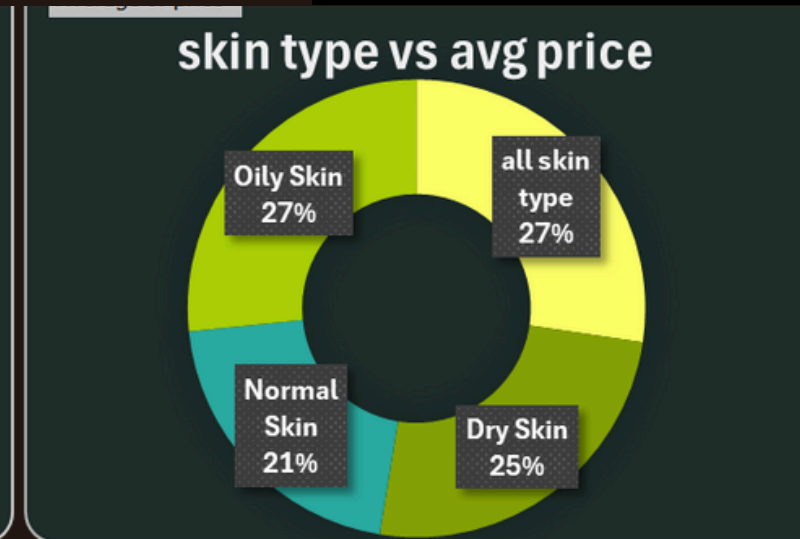
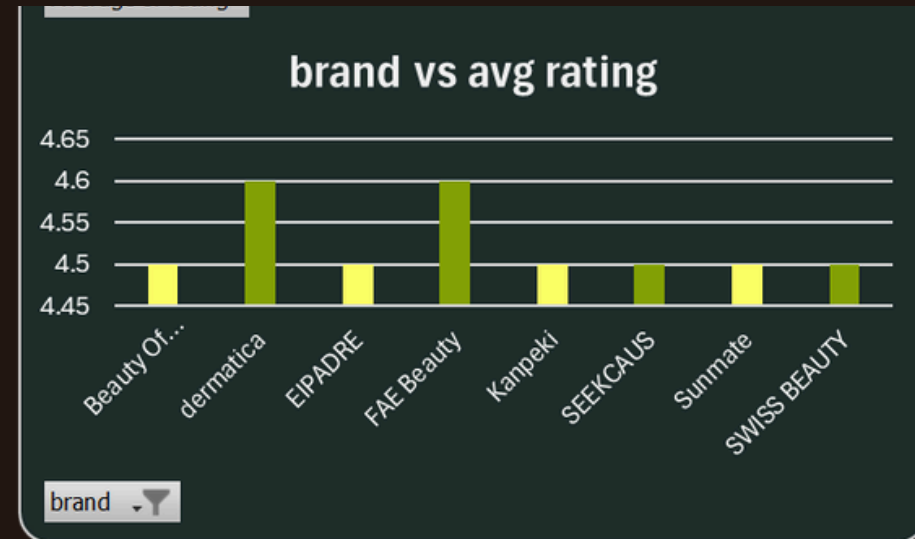
LOTUS HERBALS Sunscreen — ₹369 — Rating: 4.1 — SPF: PA+++

💰 Best Sunscreens Under ₹500 (High Rating)

Hana Beauty Sunscreen — ₹224 — Rating: 4.5



DASHBOARD



brand

Chemist at Play	COLORBAR
Conscious Che...	CosmoQ
cureskin	deconstruct
DEINOLOC	dermatica
Dermatouch	Dot & Key
DR SMITA JAINS	Dr. Alies Professi

- all skin type
- Dry Skin
- Normal Skin
- Oily Skin

- suitable
- Men
- Men & Women
- Women

- spf rating
- PA+
- PA++
- PA+++
- PA++++

Analysis



315

TOTAL PRODUCTS

369

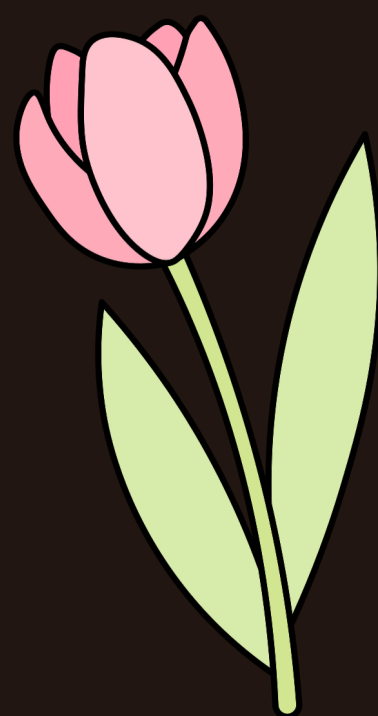
AVERAGE PRICE

4.2

AVERAGE RATING

Lotus , herbal ,
biotiqui

TOP 3 BRANDS BY
RATING /POPULARITY



thankyou