Business Problem Statement

Myntra wants to improve bottomwear sales performance in the men's category by identifying:

- High-performing products
- Underperforming products
- Best discount strategies
- Value-focused brands
- Customer trust indicators
- Pricing misalignments
- Category-level opportunities

The newly engineered columns will help reveal deep insights on discount efficiency, product value, customer trust, and demand patterns. These insights will support decisions in pricing, assortment planning, brand negotiations, and marketing promotions.

Your role is to generate data-backed statistical & visual insights using Python and SQL.

Deliverables using Python

1. Which brands offer the highest overall value-for-money in the men's bottomwear category?

2. Which products exhibit high demand despite offering low discounts?

3. Which products have high ratings but low trust?

4. What is the optimal discount range that maximizes product popularity across brands?

5. Which products should be promoted during sales campaigns based on product_score drivers?

6. Are there any underpriced hidden gems?

7. Which brands rely heavily on discounts vs. which rely on product quality and popularity?

Deliverables using SQL

1. How does the discount percentage correlate with product ratings and number of ratings across brands?

2. Which brands experience the largest change in sales volume (proxy: number_of_ratings) when prices drop or discounts increase?

3. What is the ideal discount range that maximizes both customer engagement (ratings, reviews) and minimizes profit loss for each brand?

4. Are premium brands (like Levi's, Calvin Klein, etc.) offering steeper discounts leading to dilution of brand equity compared to mid-range brands?

5. How do similar product types (e.g., "Men Slim Fit Jeans") differ in average price and discount across brands, and which pricing strategies outperform in ratings?

6. Which brands consistently achieve high ratings and engagement despite higher pricing, indicating strong perceived value?

7. Which product categories (e.g., Cotton Pants, Slim Fit Jeans, Joggers) perform best for specific brands in terms of both user feedback and pricing balance?

8. Which brands or product types receive consistently low ratings or very few reviews, suggesting low market traction?

9. Which combinations of price range and rating trends suggest products that should be restocked frequently due to high demand and customer satisfaction?

10. Are there brands or categories where customer engagement (number_of_ratings) grows steadily over time, signaling potential for long-term retention and repeat purchases?