DATA ANALYTICS PROJECT

AMAZON SALES

OVERVIEW

- Dataset Walkthrough
- Understanding Dataset Hierarchy
- Data Preprocessing
- Exploratory Data Analysis
- Data Visualization

COLUMN DETAILS

- product_id - Product ID
- product_name - Name of the Product
- category - Category of the Product
- discounted_price - Discounted Price of the Product
- actual_price - Actual Price of the Product
- discount_percentage - Percentage of Discount for the Product
- rating - Rating of the Product
- rating_count - Number of people who voted for the Amazon rating
- about_product - Description about the Product
- user_id - ID of the user who wrote review for the Product
- user_name - Name of the user who wrote review for the Product
- review_id - ID of the user review
- review_title - Short review
- review_content - Long review
- img_link - Image Link of the Product
- product_link - Official Website Link of the Product

TASK

- Clean and prepare the data to ensure it's accurate and consistent
- Summarize the data using descriptive statistics like averages and ranges
- Visualize the data with charts and graphs to see patterns and relationships
- Detect outliers
- Divide the data into groups for better understanding
- Summarize our findings

OBJECTIVES

- Explore product categories, pricing trends, customer ratings, and sales data to uncover factors that influence consumer buying behavior.
- Identify patterns and traits of top-performing products that appeal most to customers.
- Convert these insights into practical strategies to enhance product design and development.
- Inform marketing campaigns with data-driven recommendations to improve outreach and effectiveness.
- Provide businesses with a deeper understanding of shifting consumer preferences and expectations.
- Develop targeted communication plans tailored to specific audience segments to increase engagement.
- Support the creation of a marketplace where consumer needs are met with precisely matched products

LIBRARIES USED

- Pandas: Data manipulation and analysis
- Numpy: Numerical operations and calculations
- Matplotlib: Data visualization and plotting
- Seaborn: Enhanced data visualization and statistical graphics

TOOLS USED

- Python, Jupyter Notebook (Feel free to use other IDEs)