

Explanation of the Lookalike for E-commerce Transactions Dataset

Explanation of Code:

- 1. Data Preparation:** Combined customer, product, and transaction data to create a comprehensive dataset. Aggregated features like total spending, average transaction value, and category preferences to represent customer profiles.
- 2. Feature Encoding and Scaling:** Encoded categorical features (e.g., Region, Category) into numerical values using one-hot encoding. Scaled the features using Standard Scaler to normalize values for cosine similarity calculation.
- 3. Cosine Similarity:** Calculated similarity scores between customer profiles based on their feature vectors. Skipped self-comparisons to focus on other customers.
- 4. Top-3 Recommendations:** For each of the first 20 customers, identified the top 3 most similar customers along with their similarity scores.
- 5. Output:** Stored recommendations in the Lookalike.csv file in the required format.