Dataset Description

Name: retail_sales_dataset.csv

Objective:

Develop a predictive model to classify customer segments based on various retail-related features. This project involves using Python for data preprocessing and exploratory data analysis (EDA), applying machine learning algorithms for model building, and utilizing Tableau for visualization and insights.

Columns:

1. **Customer_ID**: Unique identifier for each customer.
2. **Customer_Name**: Name of the customer.
3. **Age**: Age of the customer in years.
4. **Gender**: Gender of the customer (0 = Female, 1 = Male).
5. **Annual_Income**: Annual income of the customer in USD.
6. **Spending_Score**: Spending score assigned by the retailer (1-100).
7. **Marital_Status**: Marital status of the customer (0 = Single, 1 = Married).
8. **Product_Category**: Preferred product category (e.g., 'Electronics', 'Clothing', 'Groceries', 'Home', 'Sports').
9. **Years_as_Customer**: Number of years the customer has been with the retailer.
10. **Number_of_Transactions**: Number of transactions made by the customer.
11. **Average_Transaction_Amount**: Average amount spent per transaction in USD.
12. **Loyalty_Card**: Whether the customer has a loyalty card (0 = No, 1 = Yes).

13. **Discount_Avail**: Whether the customer avails discounts (0 = No, 1 = Yes).
14. **Preferred_Shopping_Channel**: Preferred shopping channel (e.g., 'Online', 'In-Store').
15. **Customer_Segment**: Customer segment classification (0 = Low Value, 1 = Medium Value, 2 = High Value) (Target Variable).

Note: Customer_Segement is the target column