Data Science Assignment: eCommerce Transactions Dataset

Task 1: Data Exploration and Preprocessing

1.1 Deliverables:

- Data Cleaning and Preprocessing Code:
    - Python code used for handling missing values, duplicates, and outliers.
    - Code for feature encoding (if applicable) and scaling.

```python
# Data cleaning example
customer_data = customer_data.dropna()  # Drop rows with missing values
customer_data = customer_data.drop_duplicates()  # Remove duplicate rows
```

- Exploratory Data Analysis (EDA) Code:
    - Code for summary statistics and visualizations like histograms, box plots, and correlation matrices.

```python
import seaborn as sns
import matplotlib.pyplot as plt
sns.heatmap(customer_data.corr(), annot=True, cmap='coolwarm')
plt.show()
```