#### 1. Number of clusters formed:

• 4 clusters were formed by the KMeans algorithm.

## 2. Davies-Bouldin Index (DBI):

• The Davies-Bouldin Index is **0.8957**, which indicates the quality of the clustering. A lower DBI value suggests that the clusters are well-separated, while a higher value would suggest poor separation.

## 3. Cluster Sizes:

- The number of customers in each cluster is as follows:
  - Cluster 0: 27 customers
  - Cluster 1: 41 customers
  - Cluster 2: 51 customers
  - Cluster 3: 80 customers

# 4. Average Total Spend per Cluster:

- Cluster 0: Average total spend is **6438.81 USD**
- Cluster 1: Average total spend is **1270.24 USD**
- Cluster 2: Average total spend is **4511.04 USD**
- Cluster 3: Average total spend is **2925.06 USD**

#### 5. Average Quantity Purchased per Cluster:

- Cluster 0: Average quantity purchased is **23.26 items**
- Cluster 1: Average quantity purchased is **5.10 items**
- Cluster 2: Average quantity purchased is **16.47 items**
- Cluster 3: Average quantity purchased is **10.75 items**

