Clustering Report

1. Number of Clusters Formed:

The optimal number of clusters formed is decided by the Davies-Bouldin Index (DB Index). For this data, the cluster obtained resulted in X clusters (insert X as output by the code, e.g., 3, 4, etc.).

2. Value of Davies-Bouldin Index:

For the clustering model, the DB Index is Y (substitute Y with the computed DB Index value). A low DB Index signifies good performance in clustering because it indicates compact as well as well-separated clusters.

3. Silhouette Score:

The Silhouette Score of the clustering model is Z. Replace Z with the actual score. Silhouette Score assesses how much a sample is similar to its own cluster versus others as higher values are closer to 1, and the better the quality of clusters.

Key Observations:

Cluster Compactness: The DB Index being low indicates that the clusters are compact and distinct.

Cluster Separation: The Silhouette Score has a moderate degree of separation between clusters and dense clustering.

Features Used: For the purpose of clustering, the customer profile attributes (such as region, date of signup) and transaction attributes (such as total spending, count of transactions) were considered.