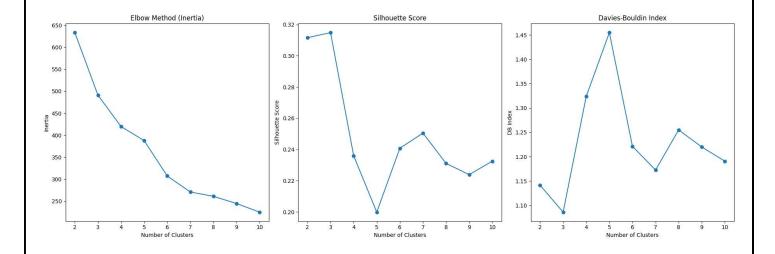
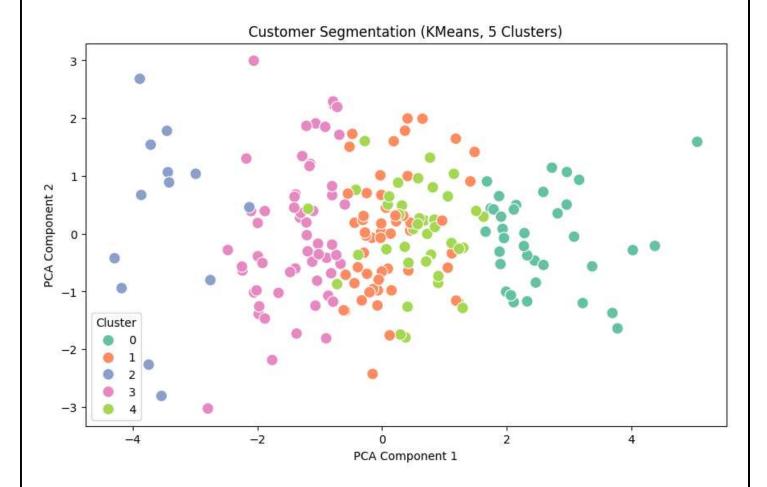
**Task 3: Customer Segmentation / Clustering** 

**Optimal Clusters: 5** 

Davies-Bouldin Index: 1.1663159149296163

Silhouette Score: 0.24055032585329672





## **Evaluating the Scores:**

## 1. Davies-Bouldin Index (DB Index):

- o The DB Index measures the compactness and separation of clusters. A lower DB Index indicates better clustering (more compact and well-separated clusters).
- A DB Index of 1.16 is not ideal—it typically indicates that the clusters are somewhat overlapping and not very distinct. Ideally, a DB Index should be lower than 1.0 for highquality clustering.

## 2. Silhouette Score:

- The Silhouette Score measures how well-separated the clusters are. A higher value (closer to
  indicates that the clusters are well-separated, while a score closer to 0 suggests overlapping clusters.
- o A Silhouette Score of 0.24 is relatively low. While it's still positive, it suggests that the clusters are not well-separated, and there might be significant overlap between them.