Customer Segmentation / Clustering

Approach:

- > Used K-Means clustering with an optimal number of clusters identified using the elbow method.
- Customer segmentation was based on total spend, transaction count, and recency.

Evaluation Metrics:

- > DB Index: Measures clustering quality.
- Visualization: Scatter plots depicting clusters.

Findings:

- > Distinct customer groups emerged based on spending and frequency patterns.
- ➤ High-value customers form a separate cluster, indicating premium segmentation strategies.