## **Customer Segmentation Report**

- 1. Number of Clusters Formed: 3 (0,1,2)
- **2. Davies-Bouldin Index i.e DB Index:** 0.7662431505517309 (The value suggest well-separated clusters)
- 3. Cluster Centers:

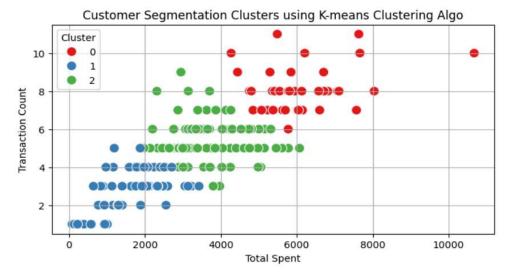
```
Cluster Centers is as follows:
Cluster 0: [1.42691672 1.40342257]
Cluster 1: [-0.96033833 -0.99519287]
Cluster 2: [0.12859923 0.16588912]
```

## 4. Cluster Sizes:

```
The respective Cluster Sizes are:
Cluster 2: 90 customers
Cluster 1: 70 customers
Cluster 0: 39 customers
```

- > Cluster 0 with 39 customers indicate high-value customers with high spending and frequent transactions
- > Cluster 1 with 70 customers indicates low value customers with low spending and lesser transactions
- > Cluster 2 with 90 customers indicate mid range customers having moderate spending and moderate transactions
- **5. Metrics:** The clustering was performed using K-Means Clustering algorithm and the features used are "Total Spent" i.e the total value spent by each of the customer and other is the "Transaction Count" i,e no.of transaction made by each customer.
- **6. Visualization**: Scatter Plot shows the segmentation/ clustering of the customers based on their total spending and the transaction count.

X-axis: Total Spent; Y-axis: Transaction Count



This Clustering helps in creating targeted marketing strategies such as personalised promotions.