The following are the cluster results obtained by varying the number of clusters between 2-10. The project only required DB Index,but I have explored another clustering known as the Silhouette score.

Number of Clusters	Davies-Bouldin Index(DBI)	Silhouette Score
3	1.5732	0.2565
4	1.1997	0.3671
5	0.8744	0.4806
6	0.7901	0.4807
7	0.7427	0.4743
8	0.7342	0.4943
9	0.7436	0.4699

The number of clusters chosen is 8, and the following are the reasons why:

- **Davies-Bouldin Index(DBI)** - Out of all configurations, the DBI for 8 clusters is the lowest at 0.7342. This is the best option because a lower DBI denotes better-defined and well-separated clusters. The closer to 0, the better this index for clustering.
- **Silhouette Score** - Out of all cluster configurations, the Silhouette Score for 8 clusters is the highest at 0.4943. This suggests that, in comparison to alternative designs, the clusters are better intra-cluster cohesive and reasonably well-separated. The closer to 1, the better the score for clustering.
- **Cluster Interpretability** - The segmentation strikes a balance between interpretability and granularity with eight clusters. It permits actionable insights from the clusters without oversimplifying (e.g., 3 clusters) or overcomplicating (e.g., 9 clusters) the grouping.
- **Balanced Trade-off** - This setup strikes a fair balance between Silhouette Score and DBI. Given the features of the dataset, the score is the best even though it falls short of the ideal of 0.5.