ZEOTAP ASSIGNMENT

Task 3: Customer Segmentation / Clustering

Perform customer segmentation using clustering techniques. Use both profile information (from Customers.csv) and transaction information (from Transactions.csv).

● You have the flexibility to choose any clustering algorithm and any number of clusters in between(2 and 10)

● Calculate clustering metrics, including the DB Index(Evaluation will be done on this).

● Visualise your clusters using relevant plots.

Deliverables:

● A report on your clustering results, including:

○ The number of clusters formed.

○ DB Index value.

○ Other relevant clustering metrics.

● A Jupyter Notebook/Python script containing your clustering code.

Evaluation Criteria:

● Clustering logic and metrics.

● Visual representation of clusters.

ANSWERS:

https://github.com/Vanshika-Pahuja/Zeotap_Vanshika-Pahuja-Assignments

Deliverables

1. **Clustering Results**:

   o   Number of clusters formed: We used **4 clusters** (as an example).

   o   **DB Index**: The Davies-Bouldin Index value (calculated above).

   o   **Other Clustering Metrics**: For example, inertia, silhouette score, etc. (if applicable).

2. **Jupyter Notebook / Python Script**: The notebook or script should explain all the steps, including data preprocessing, clustering, evaluation, and visualization.

ANSWER:
GITHUB LINK:

https://github.com/Vanshika-Pahuja/Zeotap_Vanshika-Pahuja-Assignments