

1. Write a program to implement the k-means algorithm.
2. Write a program to implement the k-means ++ algorithm.
3. Write a program to implement k-medoids algorithm.
4. Write a program to implement an agglomerative hierarchical clustering algorithm.
5. Write a program to implement a divisive algorithm.
6. Write a program to implement the DBSCAN algorithm.
7. Write a program to perform outlier analysis using the Z-score method.
8. Write a program to perform outlier detection using IQR method.
9. Write a program to implement a mini-batch k-means algorithm.

Note:

- You are expected to create a custom function that implements the specified algorithm..
- Use “data.csv” for 1-5.
- Use “data2.csv” for 6.
- Use “data3.csv” for outlier analysis.
- Use “data4.csv” for 9.