1. Apply k-means for clustering of data_9
2. Apply my_kmeans for clustering of data_9
3. Apply toolbox ClusteringTest for clustering of data_2c
4. Apply toolbox ClusteringTest for classification of data_2c
5. Apply toolbox ClusteringTest for classification of data_3c
6. Write Matlab codes to draw half color points randomly from data_3c for training
7. Given two-color points, the underlying mapping from position to color can be derived based on K-means and hyper-plane fitting. Let the mapping be a linear combination of exponential distances to K means.

A. Draw a flow chart (I) to determine K means and optimal coefficients.
B. Write a Matlab function to implement the flow chart.
C. Draw a flow chart (II) for coloring.
D. Write a Matlab function to implement the flow chart.
E. Draw a flow chart (III) to compare generated colors and true colors.
F. Write Matlab codes to calculate error rate.
G. Draw a flow chart (IV) to derive a mapping from training data
H. Write matlab codes to implement the flow chart and apply it to process training data (6).
I. Draw a flow chart (V) to test mapping (H) with data_3C.
J. Write Matlab codes to implement the flow chart and apply it to data_3C.