

Problem Statement

Assignment 2: Classification and Segmentation with clustering

a) For the dataset of Assignment 1, perform classification using k-means clustering for the non-linearly separable cases

b) Perform k-means clustering based segmentation of the given images,

i) When using only pixel colour values as features

ii) When using both pixel colour and location values as features

(in both cases, display the segmentation output as a colour [image](#), with different colours assigned pixels belonging to different clusters, and same colours assigned to pixels belonging to the same cluster)