

DATA SCIENCE ANALYSIS

- **Group Members :**

1.D.Lakshmi Sivani - EE18BTECH11012

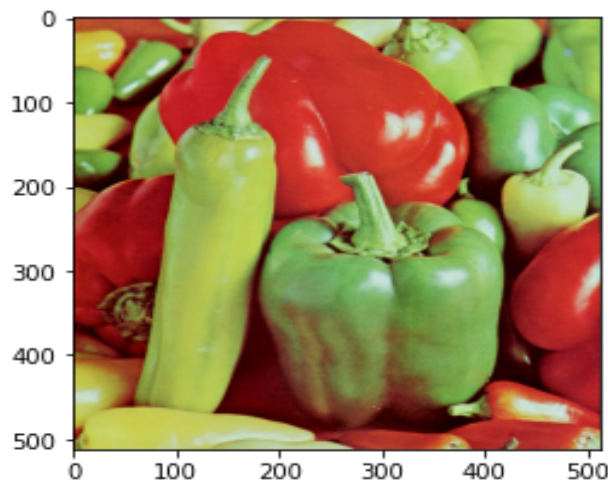
2.T.Sai Varsha - EE18BTECH11042



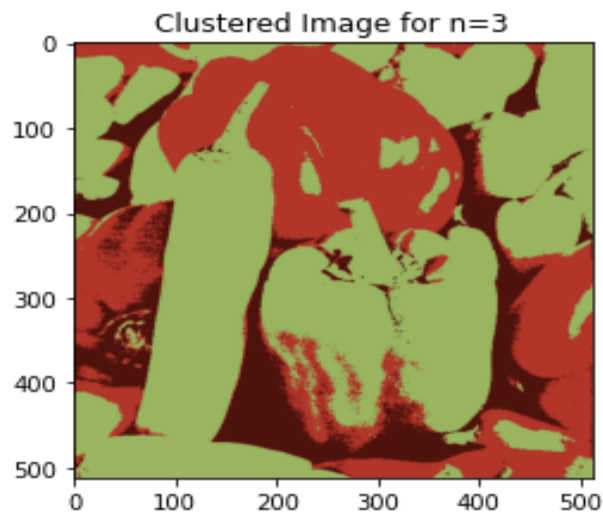
K - Means Clustering

- Here, First we take an original image and cluster that image based on color using the K-Means clustering algorithm.
- Below shown are the clustered images for clusters 3,5,8 using this algorithm.

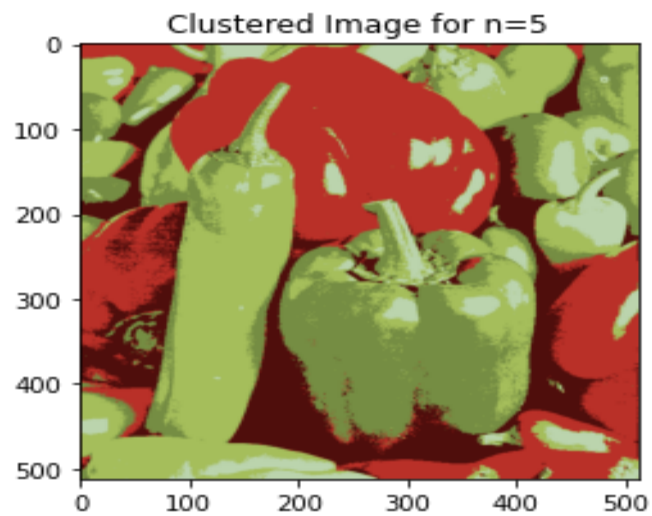
Original Image:



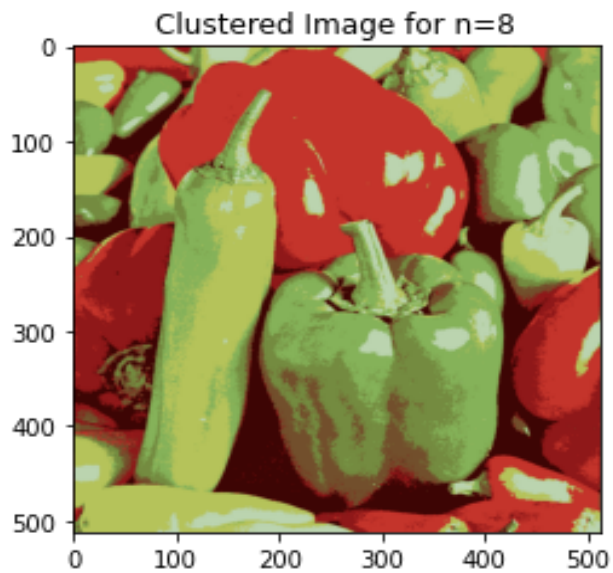
❑ For $k = 3$ clusters :



❑ For $k = 5$ clusters :



❑ **For $k = 8$ clusters :**



We can choose the optimal K value to get a clustered image as close to the original image as possible. Here $k = 8$ can be considered as the optimal number of clusters.