Digital Image Processing Project

Algorithm Used : Kmeans

Implemented Using: OpenCV ,Python

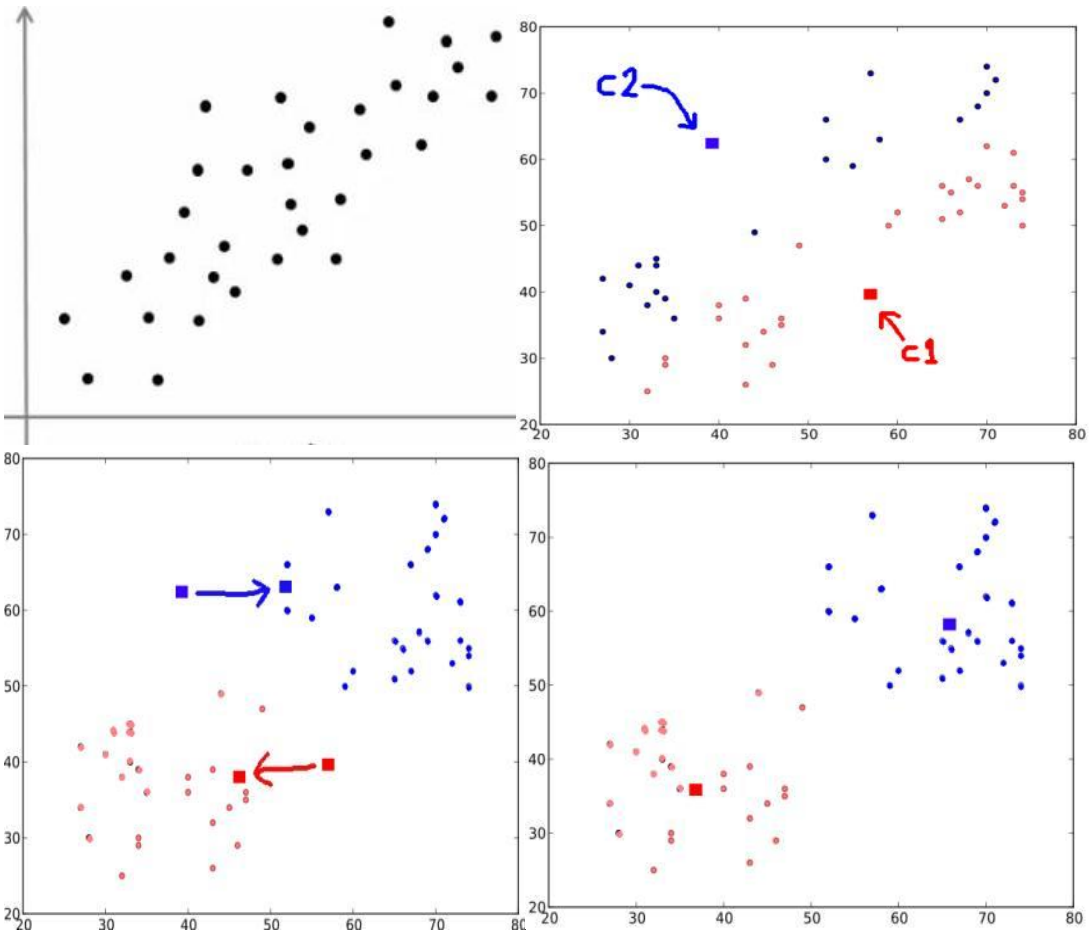
Done By:

Sowmya Sri P

1NT18IS158

INFERENCES:

- Gained a brief understanding of how kmeans algorithm works.



- Number of clusters(K) are assigned randomly
- Points are placed near the cluster based on their distance from each cluster
- This process is repeated until the distances between points and cluster are min.

- Observed how the original image changes to cartoonised image in a slightly different manner for different values of K.

Original image

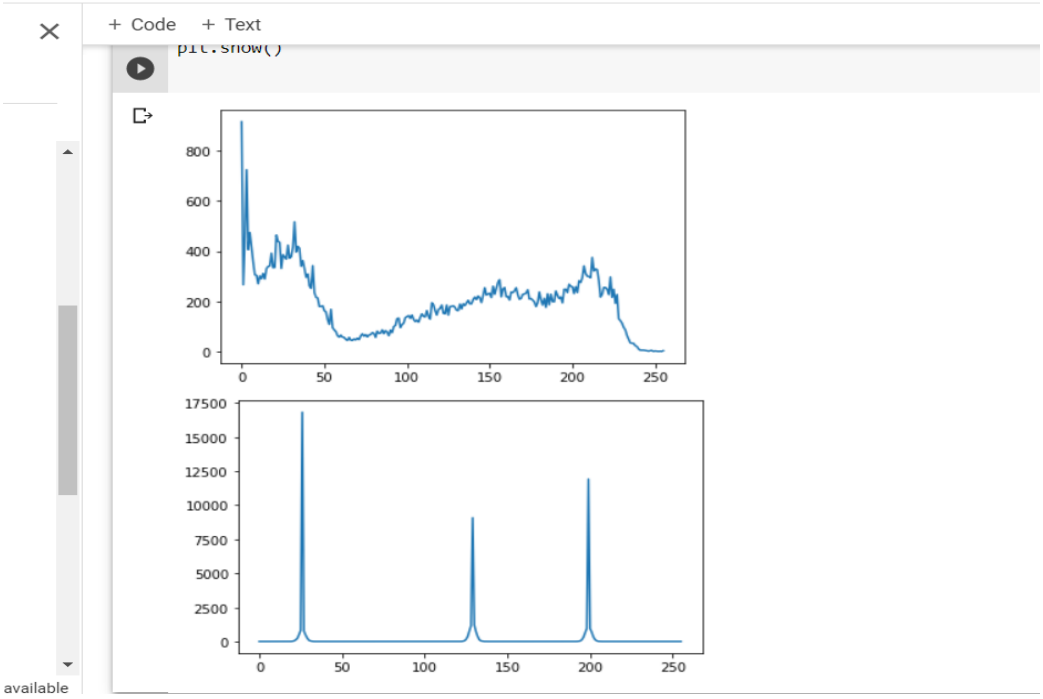
k=3

K=5

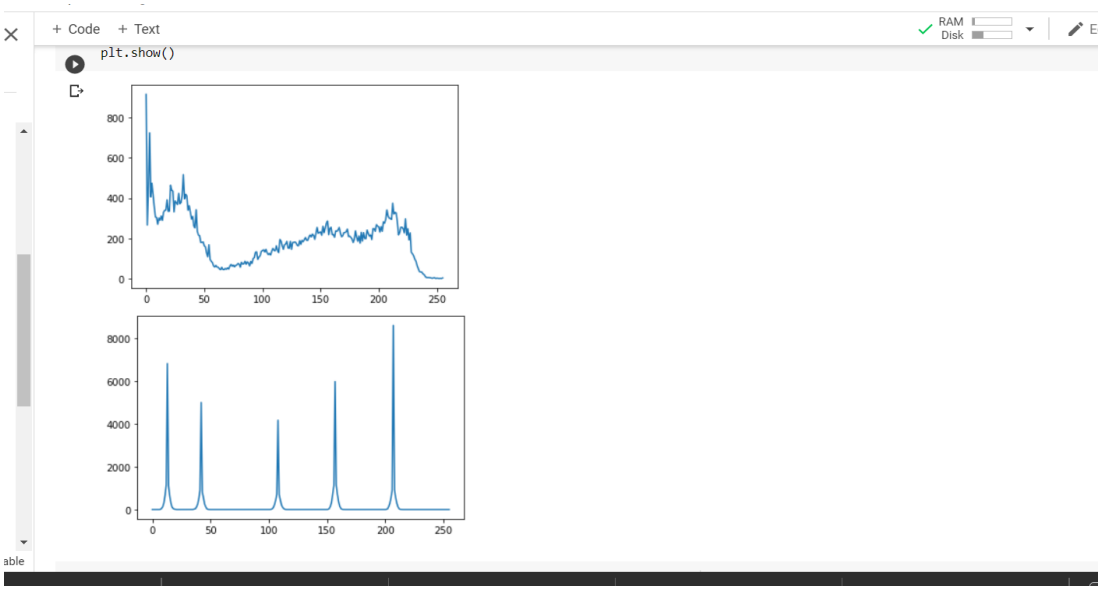
k=8

- Image is getting converted into cartoonised form.
- We can observe here that at k=8 the background has also changed as compared to k=3 and k=4

- Observed how the histogram changes for the original image and the output image



K=3



K=5

- We can see that there was too much variance in the data before and now it has reduced .