Module 7: Unsupervised Learning

Case Study

edureka!

Case Study

Objective:

- Use k-means clustering for image segmentation and to identify dominant color in the image.

Question:

1.Open and display the image "dog.jpeg". Convert the image in to numpy array, so that i can be   used in further processing.

> [Hint: Use PIL module from python]

2. Find out the dimensions of the image and convert it in to a two-dimensional array.

3.Use kmeans clustering with k set to 3 and cluster the image.

> [Hint: Refer to k-means module of scikit learn]

4. Predict the cluster label of every pixel in the image and plot it back as an image.

5. Find out the three dominant color in the image.

> [Hint: The cluster centers should correspond to three dominant colors]