from matplotlib.image import imread

from sklearn.cluster import KMeans

import matplotlib.pyplot as plt

imo= imread("C:\\Users\\DELL\\Downloads\\97851f8076c6b29ed2cbb446dead2eb6.jpg")

plt.figure(figsize=(14,8))

plt.imshow(imo)

imo=imo/255.0

imo.shape

x=imo.reshape(-1,3)

x.shape

km=KMeans(n\_clusters=2)

km.fit(x)

img\_seg = km.cluster\_centers\_

img\_seg=img\_seg[km.labels\_]

img\_seg= img\_seg.reshape(imo.shape)

plt.figure(figsize=(12,10))

plt.imshow(img\_seg)

km=KMeans(n\_clusters=4)

km.fit(x)

img\_seg = km.cluster\_centers\_

img\_seg=img\_seg[km.labels\_]

img\_seg= img\_seg.reshape(imo.shape)

plt.figure(figsize=(12,10))

plt.imshow(img\_seg)

km=KMeans(n\_clusters=8)

km.fit(x)

img\_seg = km.cluster\_centers\_

img\_seg=img\_seg[km.labels\_]

img\_seg= img\_seg.reshape(imo.shape)

plt.figure(figsize=(12,10))

plt.imshow(img\_seg)

km=KMeans(n\_clusters=32)

km.fit(x)

img\_seg = km.cluster\_centers\_

img\_seg=img\_seg[km.labels\_]

img\_seg= img\_seg.reshape(imo.shape)

plt.figure(figsize=(12,10))

plt.imshow(img\_seg)