Jurassic Park Image segmentation

Objective:

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

Question:

1. Open and display the image "jurassic_park.jpeg".



2. Convert the image in to numpy array, so that it can be used in further processing.

[Hint: Use PIL module from python]

- 3. Find out the dimensions of the image and convert it in to a two-dimensional array.
- 4. Use kmeans clustering with k set to 4 and cluster the image. [Hint: Refer to k-means module of scikit learn]
- 5. Predict the cluster label of every pixel in the image and plot it back as an image.
- 6. Find out the three dominant colors in the image.

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