

## README ON IMAGE COMPRESSION

- 1) We used PIL, numpy and IPython libraries. 'PIL' is for manipulating and reading images. 'numpy' is used for generating random numbers, storing Pixel data and finding euclidean distance. From 'IPython' we used display Function to display images in jupyter.
- 2) Firstly we read image data which is in 3d(R,G,B). We wrote a function named 'KmeanS'. It takes complete pixel data and no. of clusters as input. It returns centroids(which is equal to no. of clusters) of clusters after implementing K-means.
- 3) Function IMG\_CLUSTER takes no. Of clusters as first argument and second argument as image object(Object obtained from Image.open).When we call this function it displays an image.
- 4) We took a [flower.jpg](#) image and made image segmentation / image compression for K=2,3,5,10.